

PRODUCT INFORMATION PACKET

FASCO®

Model No: D221A

Catalog No: D221A

Fan Coil & Air Conditioner Motor, 1/6,1/8,1/10,1/12 HP, 1 Ph, 60 Hz, 120 V, 1550 RPM, 4 Speed,
42 Frame, OAO



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RegalRexnord



Nameplate Specifications

Phase	1	Output HP	1/6,1/8,1/10,1/12 Hp
Voltage	120 V	Speed	1550 rpm
Frame	42	Enclosure	Open Air Over
Thermal Protection	Thermally Protected	Ambient Temperature	40 °C
Frequency	60 Hz	Current	3.44,1.9,1.48,1.3 A
Duty	Continuous	Insulation Class	B
UL	Recognized	CSA	Y
CE	N	Number of Speeds	4

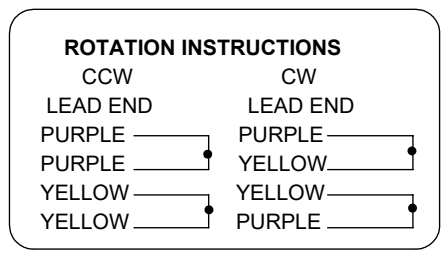
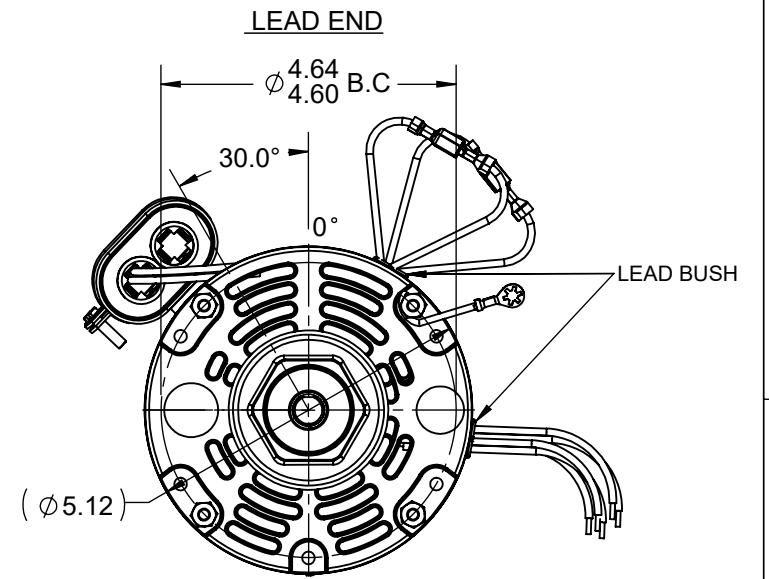
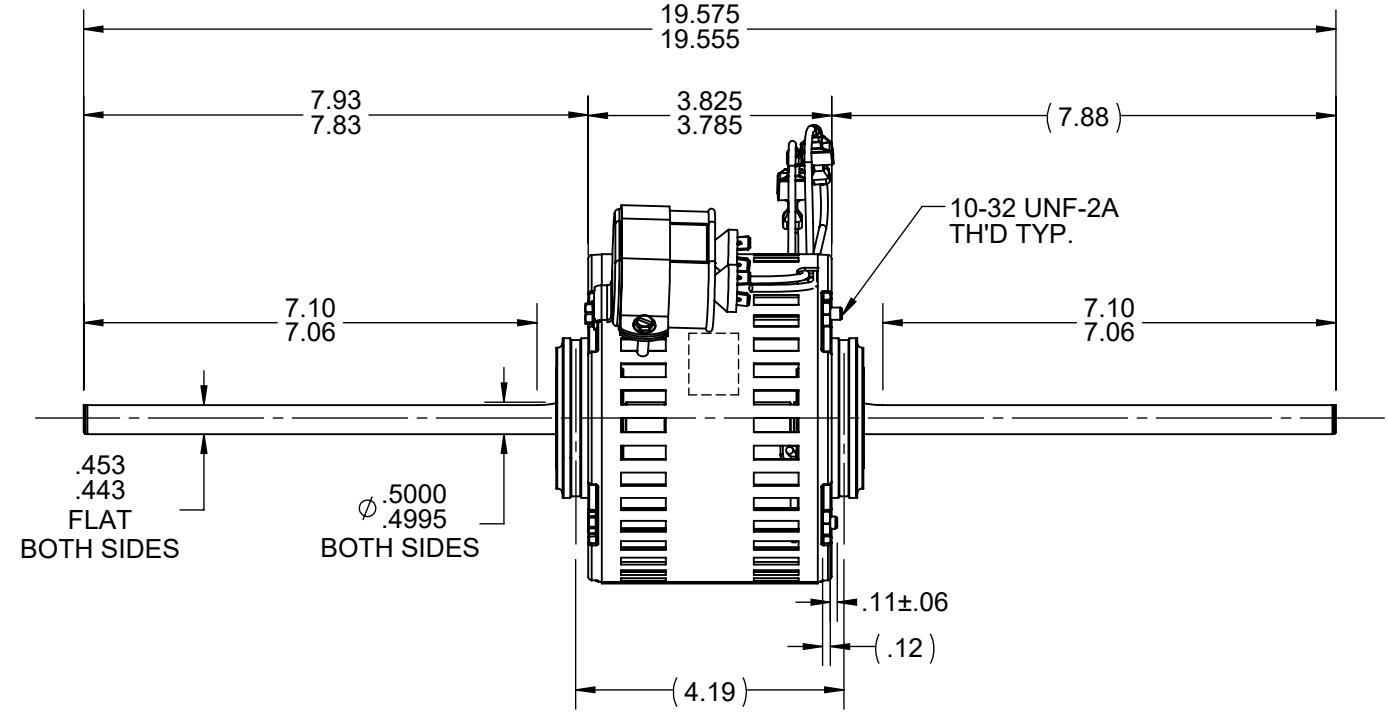
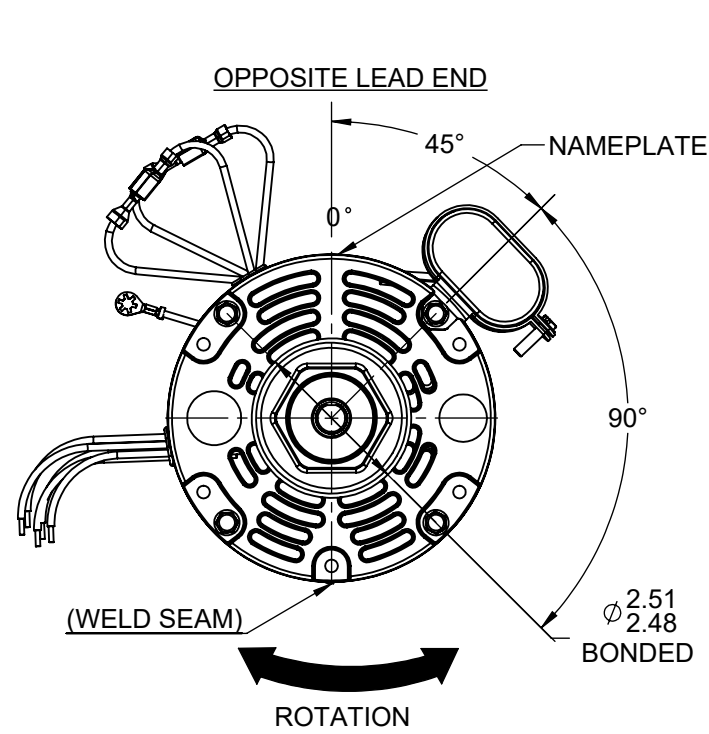
Technical Specifications

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Mounting	Resilient Rings	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	Flat	Frame Length	3.83 in
Shaft Diameter	0.500 in	Shaft Extension	7.88X.5X7.88 in
Outline Drawing	71850429R		

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S.NO	CONNECTION	COLOR	EXIT TYPE	EXIT LOC (VIEWING LE)	GAGE	MATERIAL	WALL THK.	LENGTH (+/- 1.50)	TERMINATION
1	COMMON LEAD	WHITE	LEAD BUSH	3:20	18	THERMOPLASTIC	2/64	31.0	0.5 BWS
2	CAPACITOR LEAD	BROWN	SHELL NOTCH	11:00	18	THERMOPLASTIC	2/64	N/R	N/R
3	CAPACITOR LEAD	BRN/WHT	SHELL NOTCH	11:00	18	THERMOPLASTIC	2/64	N/R	N/R
4	HIGH SPEED LEAD	BLACK	LEAD BUSH	3:20	18	THERMOPLASTIC	2/64	31.0	0.5 BWS
5	MED HI SPEED LEAD	ORANGE	LEAD BUSH	3:20	18	THERMOPLASTIC	2/64	31.0	0.5 BWS
6	MED LO SPEED LEAD	BLUE	LEAD BUSH	3:20	18	THERMOPLASTIC	2/64	31.0	0.5 BWS
7	LOW SPEED LEAD	RED	LEAD BUSH	3:20	18	THERMOPLASTIC	2/64	31.0	0.5 BWS
8	REVERSIBLE LEAD	YELLOW	LEAD BUSH	1:00	18	THERMOPLASTIC	2/64	7.0	0.25 FEMALE SQC
9	REVERSIBLE LEAD	YELLOW	LEAD BUSH	1:00	18	THERMOPLASTIC	2/64	7.0	0.25 MALE SQC
10	REVERSIBLE LEAD	PURPLE	LEAD BUSH	1:00	18	THERMOPLASTIC	2/64	7.0	0.25 FEMALE SQC
11	REVERSIBLE LEAD	PURPLE	LEAD BUSH	1:00	18	THERMOPLASTIC	2/64	7.0	0.25 MALE SQC
12	GROUND LEAD	GRN/YEL	CLAMP SCREW	1:30	18	THERMOPLASTIC	2/64	7.0	#10 SERR.EYELET

VENTILATION SYSTEM	
SHELL VENTS	OPEN
ENDSHIELD(OPP.LEAD END)	OPEN
ENDSHIELD(LEAD END)	OPEN



NAME PLATE DATA	
MODEL	71850429
CUST P/N	D221A
HP	1/6-1/8-1/10-1/12
RPM	1550 (4SPD)
VOLTS	120
HZ	60
SPEEDS	4
AMPS	3.44 1.90 1.48 1.30
CAP REQ D-1	5 /370
CAP REQ D-2	N/R
CONN.DRW	NP24X350209
ROTATION	REVERSIBLE

NOTE:
 1. NAMEPLATE LABEL LOCATION: 360 - CENTER - READ FROM LE WITH RESPECT TO MOTOR ZERO.
 2. OVERLOAD PROTECTOR : AUTOMATIC RESET (7AM 036)

DRAWING REVISION AE	REVISION BY SURYA	REV DATE/© DATE 05/08/2024
REQUEST NUMBER ECR-0233789	APPROVED BY Muralidar	DATE 05/08/2024
REQUEST NUMBER DESCRIPTION REMOVED SUFFIX R FROM NAME PLATE DETAILS		
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DRAWN BY BHANU	 Regal Beloit America, Inc.
DATE 04/18/2023	
APPROVED BY NV	DESCRIPTION OUTLINE
DATE 04/18/2023	CUSTOMER NAME: FASCO DISTRIBUTION CO.
REFERENCE 71840264	MATERIAL
THIRD ANGLE PROJECTION	PROCESS/FINISH
SIZE B	DRAWING NUMBER 71850429R
	SHEET 1 OF 1

Winding and Test Specification

WTS # 82850429A-1

Revision # 1	Revised By : 610143927	Rev. Date : Mar 13, 2024	First Made for : 71850429R
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Comments : UPDATED NP DETAILS PER TEST DATA

Engineering Data				WTS Nameplate Data			
Frame	29	Stator Punching	87356050	Horsepower	1/6	RPM	1550/4 SPD
Motor Type	KCP	Rotor Punching	87356051	Voltage	120	Amps	3.44 1.90 1.30
Air Gap	.012	PE Endring	88286016	Frequency	60	Phases	1
Stack	1.00	OPE Endring	88286016	Capacitor	5.0 μ fd	Cap Volts	370
Con. Diag.	24B200217FIG22	Skew, Electric	10 ^o	Test Volts : 120 Low Spd St Volts : 173			
Wdg. Diag.	62006045	Rotor Resistance	6.0	Test Frequency : 60			
Engineer	Durga	Max Space Factor	.46	Test Instructions : 24A105040AA-P1			
Spl. Insul.		Energy SaverLbl	No				
Design Type	A						

Winding	Winding Characteristics							Resistance			Tap (Coil#)	
	Poles	N1e	Strands	Wire Size	Wire Spec	Shift	Turns	Weight	Min	Nominal		Max
Main *	4	134.5	1	0.0213	B22M47P1	0	45 56 58	0.59	9.19	9.67	10.16	
X Main	4	51.3	1	0.0201	B22M47P1	0	12 23 24	0.20	3.90	4.11	4.32	
Y Main	4	27.1	1	0.0179	B22M47P1	0	9 11 12	0.08	2.62	2.76	2.90	
Z Main	4	27.1	1	0.0179	B22M47P1	0	9 11 12	0.08	2.62	2.76	2.90	
W Main												
Start	4	221.1	1	0.0126	B22M47P1	91	75 105 130 75 105	0.31	39.08	41.14	43.19	

	N. L. Performance Data				Full Load Performance						
	Amps	Watts		Cap. Volts	Amps		Watts		Speed	Torque	
	Nominal	Nominal	Max		Nominal	Max	Nominal	Max	Nominal	Min	Nominal
High	1.74	80	96	229	2.91	3.20	302	317	1620	10.3	11.4
Med. High	0.85	40	48		1.60	1.76	161	169	1620	5.6	6.2
Medium											
Med. Low	0.66	33	40		1.24	1.36	124	130	1620	4.2	4.7
Low	0.53	28	34		0.99	1.09	98	103	1620	3.2	3.6

	Max. Torque			Locked Rotor		
	RPM	Torque		Amps	Watts	Torque
		Min	Nominal	Nominal	Nominal	Nominal
High	1441	12.3	13.7	6.19	630	1.5
Med. High		7.1	7.9		346	0.8
Medium					268	0.6
Med. Low		5.5	6.2		213	0.4
Low		4.4	4.9			

	Customer/Special Load Points						
	Speed	Torque		Watts		Amps	
	Nominal	Min	Nominal	Nominal	Max	Nominal	Max
High	1550	12.3	13.0	364	382	3.44	3.78
Med. High	1550	6.9	7.3	197	207	1.92	2.11
Medium							
Med. Low	1550	5.3	5.6	152	160	1.49	1.64
Low	1550	4.2	4.4	120	126	1.19	1.31

* Large wire size may be double stranded.



Motor Details

Model :	71850429R	Catalog Number :	
General:			
Application :	DIST SALES	Motor Category :	COMPLETE MOTOR
Phases :	1	Production Status :	PROD
# of Speeds :	4	Stock Status :	
Testspec :	82850429A-1	Approved For Sale :	
Horiz/Vertical :	HOR	Restricted Model :	
Shell Enclosure :	OPEN	Customer :	FASCO DISTRIBUTION CO
Endshield Enclosure :	OPEN	Customer Part# :	D221A
Nameplate Data:			
Horsepower :	1/6-1/8-1/10-1/12	GE Type :	KCP
RPM :	1550(4SPD)	Time Rating :	AO
Voltage :	120	Frequency :	60
FL Amps :	3.44-1.90-1.48-1.30	Insulation Class:	B
Capacitor 1mFd/V :	5.00/370	Capacitor 2mFd/V :	N/R
Additional Information :	N/R		
Miscellaneous:			
Fullload RPM - HI :	1620	GE Frame :	29
Poles :	6	Shell Length :	3.375
Rotation :	CCW/CW	Drains :	N
Thermal Protection :		Est. Weight :	8
Finish Color:	STD GRAY	Capacitor By :	INCLUDED
OVERLOAD INFORMATION::			
Protector:	24A100514P11	Overload Temp :	150/140
Catalog No:	7AM036A54838C	Vendor Name:	TEXAS INSTRUMENTS
THERMAL CUT-OFF INFORMATION:			
TCO:	N/A	Overload Temp :	N/A
Catalog No:	N/A	Vendor Name:	N/A
U.L.CONSTRUCTION FILES:			
Motor Construction:	E46035(excluding SME)	Class B Insulation :	E306343(excluding SME)
Over Load :	E27885(excluding SME)	CSA(REY) :	MC236833(excluding SME)
Shaft:			
PE Type :	FLAT	OPE Type :	FLAT
PE Length :	7.88	OPE Length :	7.88
PE Diameter :	.5	OPE Diameter :	.5
PE Flat Length :	7.08	OPE Flat Length :	7.08
Endshields:			
PE Material :	AL	OPE Material :	AL
PE Hub Type :	STD	OPE Hub Type :	STD
PE Oiler :	N/R	OPE Oiler :	HOLE
PE Oil Plug :	N/R	OPE Oil Plug :	N/R
PE Mounting Holes :	N/R	OPE Mounting Holes :	N/R
Bearings:			
PE Bearing Type :	BALL	OPE Bearing Type :	BALL
Bearing Protection :	No	Rohs Compliant :	No
Mounting:			
Base :	RB	Lug :	N/R
Clamp Screw :	Yes	Weld Screw :	No
Base:			
Type :	N/R	Height :	0
Reversed :	Y	Assembly Angle :	N/R degrees CW from Oil boss viewed from OPE of the motor.
Extended Clamp Screws:			
PE Pattern :		OPE Pattern :	
PE Length :	0.0	OPE Length :	0.11
PE Nut Qty :	0	OPE Nut Qty :	1
Head End :	PE	Screw Size :	#10
Nut Thickness :	.12		
Lead & Cord :			
Lead End :	OPE	Lead Type :	
Lead Exit H/W :	NYLON GROMMET	Lead Harness Desc :	N/R
Lead Exit H/W Orient. :	STD		

Note : Exit position is viewed from the Lead End with the Shell Weld at 6:00.

Grounding :

Type :	LEAD	Location :	1:30 viewed from OPE with Oil boss at 12:00
Exit Type :	CLAMPSCREW	AWG Size :	18
Length :	7.00	Color :	GRN-YEL
Terminal :	#10 SERRATED EYELET	Ins.Material & Thickness	2/64 THROMOPLAST

Diagrams and Dimensions :

Outline Drawing :	71850429R	C-Dimension :	19.57
Connection Diagram :	24B200217 Fig# 22	Connection Label :	NP24X350209

Notes :

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Date of last revision : **13-MAR-24**

