

PRODUCT INFORMATION PACKET

FASCO®

Model No: D277A

Catalog No: D277A

Fan Coil & Air Conditioner Motor, 1/10,1/12,1/20 HP, 1 Ph, 60 Hz, 277 V, 1050 RPM, 3 Speed,
42 Frame, OAO



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RegalRexnord



Nameplate Specifications

Phase	1	Output HP	1/10,1/12,1/20 Hp
Voltage	277 V	Speed	1050 rpm
Service Factor	1.0	Frame	42
Enclosure	Open Air Over	Thermal Protection	Automatic
Ambient Temperature	40 °C	Frequency	60 Hz
Current	0.65,0.4,0.3 A	Duty	Continuous
Insulation Class	B	UL	Recognized
CSA	Y	CE	N
Number of Speeds	3		

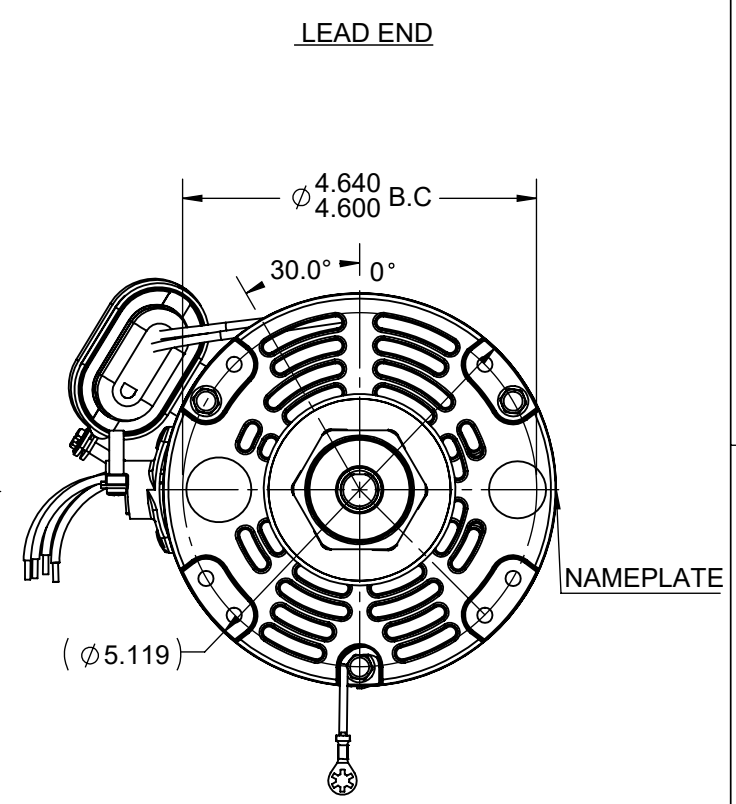
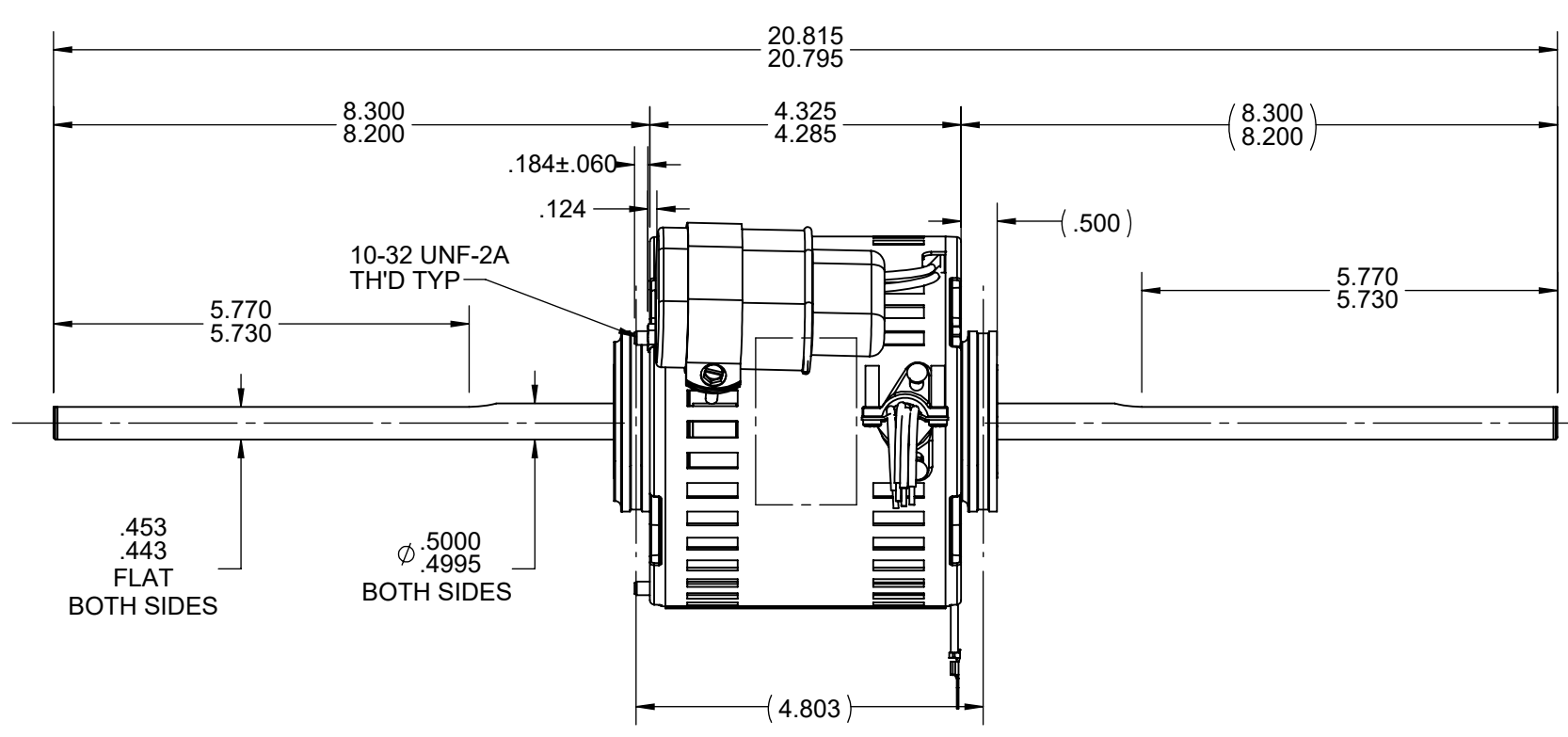
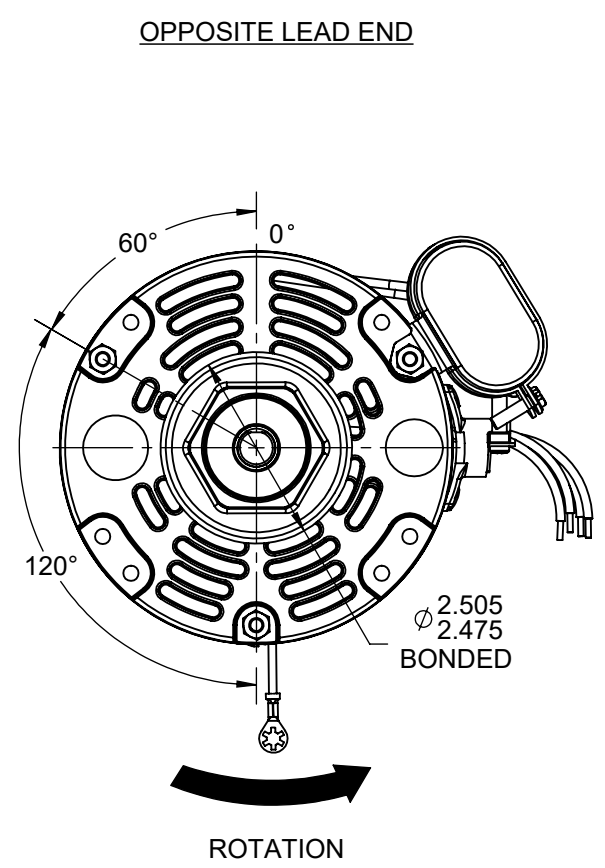
Technical Specifications

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	6	Rotation	Clockwise Lead End
Mounting	Resilient Rings	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	Flat	Frame Length	4.33 in
Shaft Diameter	0.500 in	Shaft Extension	8.25X.5X8.25 in
Outline Drawing	71870449R		

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4		3			2				
S.NO	CONNECTION	COLOR	EXIT TYPE	EXIT LOC (VIEWING LE)	GAGE	MATERIAL	WALL THK.	LENGTH (+/- 1.50)	TERMINATION
1	COMMON LEAD	WHITE	CONDUIT CLAMP	9:00	18	THERMOPLASTIC	2/64	31.00	0.5 BWS
2	CAPACITOR LEAD	BROWN	SHELL NOTCH	11:00	18	THERMOPLASTIC	2/64	N/R	0.25 FQC
3	CAPACITOR LEAD	BRN/WHT	SHELL NOTCH	11:00	18	THERMOPLASTIC	2/64	N/R	0.25 FQC
4	HIGH SPEED LEAD	BLACK	CONDUIT CLAMP	9:00	18	THERMOPLASTIC	2/64	31.00	0.5 BWS
5	MED SPEED LEAD	BLUE	CONDUIT CLAMP	9:00	18	THERMOPLASTIC	2/64	31.00	0.5 BWS
6	LOW SPEED LEAD	RED	CONDUIT CLAMP	9:00	18	THERMOPLASTIC	2/64	31.00	0.5 BWS
7	GROUND LEAD	GRN/YEL	CLAMP SCREW	6:00	18	THERMOPLASTIC	2/64	7.0	#10 SERR.EYELET

1	
VENTILATION SYSTEM	
SHELL VENTS	OPEN
ENDSHIELD(OPP.LEAD END)	OPEN
ENDSHIELD(LEAD END)	OPEN



NAMEPLATE DATE	
MODEL	71870449R
CUST P/N	D277A
HP	1/10-1/12-1/20
RPM	1050(3 SPD)
VOLTS	277
HZ	60
SPEED	3
AMPS	0.65-0.4-0.3
CAP REQ'D-1	4/370
CAP REQ'D-2	N/R
CONN. DWG	NP24X350200
ROTATION	CWLE

NOTE:
 1. NAMEPLATE LABEL LOCATION: 90° - CENTER - READ FROM LE WITH RESPECT TO MOTOR ZERO.
 2. OVERLOAD PROTECTOR : AUTOMATIC RESET (7AM 036)

DRAWING REVISION	REVISION BY	REV DATE/© DATE
B		
REQUEST NUMBER	APPROVED BY	DATE
NMR-0225203		
REQUEST NUMBER DESCRIPTION		
INITIAL DRAWING PER SR23-0592		
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DRAWN BY	BHANU	Regal Beloit America, Inc.
DATE	04/26/2023	
APPROVED BY	NV	DESCRIPTION
DATE	04/26/2023	OUTLINE
REFERENCE	71860027	CUSTOMER NAME: FASCO DISTRIBUTION CO.
THIRD ANGLE PROJECTION	B	MATERIAL
		PROCESS/FINISH
		SIZE
		DRAWING NUMBER
		71870449R
		SHEET
		1 OF 1

Winding and Test Specification

WTS # 82870449-1

Revision # 1	Revised By : 610143927	Rev. Date : Nov 14, 2023	First Made for : 71870449R
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Comments : ADDED SPECIAL INSULATION PER EXISTING FASCO MODEL

Engineering Data				WTS Nameplate Data			
Frame	29	Stator Punching	87356050	Horsepower	1/10-1/12-1/20	RPM	1050 (3 SPD)
Motor Type	KCP	Rotor Punching	87356051	Voltage	277	Amps	0.65 0.40 0.30
Air Gap	.012	PE Endring	88286015	Frequency	60	Phases	1
Stack	1.50	OPE Endring	88286015	Capacitor	4.0 µfd	Cap Volts	370
Con. Diag.	24B200217FIG2	Skew, Electric	10°	Test Volts : 277 Low Spd St Volts : 190			
Wdg. Diag.	62006060	Rotor Resistance	66.1	Test Frequency : 60			
Engineer	Durga	Max Space Factor	.49	Test Instructions : 24A105040AA-P1			
Spl. Insul.	24A105023DB-1	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 *	6	342.4	1	0.0113	B22M47P1	0	170 230	0.59	115.23	121.29	127.36	
X Main	6	78.8	1	0.0113	B22M47P1	0	39 53	0.14	26.38	27.77	29.16	
Y Main	6	78.8	1	0.0113	B22M47P1	0	39 53	0.14	26.38	27.77	29.16	
Z Main												
W Main												
Start	6	237.5	1	0.0113	B22M47P1	92	90 180	0.41	79.35	83.52	87.70	

	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	0.33	71	85	429	0.55	0.60	148	155	1080	8.2	9.1
Med. High											
Medium	0.23	51	61		0.37	0.41	102	107	1080	5.4	6.0
Med. Low											
Low	0.16	38	46		0.27	0.30	74	78	1080	3.8	4.2

	Max. Torque			Locked Rotor		
	RPM	Torque		Amps	Watts	Torque
		Min	Nominal	Nominal	Nominal	Nominal
High	968	9.4	10.5	0.85	225	3.5
Med. High					149	2.3
Medium		6.4	7.1			
Med. Low					106	1.6
Low		4.6	5.1			

	Customer/Special Load Points						
	Speed	Torque		Watts		Amps	
	Nominal	Min	Nominal	Nominal	Max	Nominal	Max
High	1050	9.3	9.8	161	169	0.59	0.65
Med. High							
Medium	1050	6.2	6.5	110	116	0.40	0.44
Med. Low							
Low	1050	4.5	4.7	80	84	0.29	0.32

* Large wire size may be double stranded.

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Motor Details

Model :	71870449R	Catalog Number :	
General:			
Application :	DIST SALES	Motor Category :	COMPLETE MOTOR
Phases :	1	Production Status :	PROD
# of Speeds :	3	Stock Status :	
Testspec :	82870449-1	Approved For Sale :	
Horiz/Vertical :	ANY	Restricted Model :	
Shell Enclosure :	OPEN	Customer :	FASCO DISTRIBUTION
Endshield Enclosure :	OPEN	Customer Part# :	D277A
Nameplate Data:			
Horsepower :	1/10-1/12-1/20	GE Type :	KCP
RPM :	1050 (3 SPD)	Time Rating :	AO
Voltage :	277	Frequency :	60
FL Amps :	0.65-0.4-0.3	Insulation Class:	B
Capacitor 1mFd/V :	4.00/370	Capacitor 2mFd/V :	N/R
Additional Information :	N/R		
Miscellaneous:			
Fullload RPM - HI :	1080	GE Frame :	42
Poles :	6	Shell Length :	3.875
Rotation :	CW	Drains :	N
Thermal Protection :		Est. Weight :	-10
Finish Color:	STD GRAY	Capacitor By :	RBC
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 :	8.25	OPE Length :	8.25
PE Diameter :	.5	OPE Diameter :	.5
PE Flat Length :	5.75	OPE Flat Length :	5.75
Endshields:			
PE Material :	AL	OPE Material :	AL
PE Hub Type :	STD	OPE Hub Type :	STD
PE Oiler :	N/R	OPE Oiler :	N/R
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 :	N/R	Lug :	N/R
Clamp Screw :	Yes	Weld Screw :	No
Extended Clamp Screws:			
PE Pattern :		OPE Pattern :	
PE Length :	0.18	OPE Length :	0
PE Nut Qty :	1	OPE Nut Qty :	0
Head End :	OPE	Screw Size :	#10
Nut Thickness :	.12		
Lead & Cord :			
Lead End :	OPE	Lead Type :	
Lead Exit H/W :	CONDUIT CONN	Lead Harness Desc :	LEAD & CAP ASM
Lead Exit H/W Orient. :	N/R		
Conductor ID :	COMM-FIXED LINE		
Exit :	9:00 - CONDUIT CONN	Length :	31.00
Color :	WHITE	Mat'l Spec :	18 2/64 THERMOPLAST
Termination :	.50 BWS	Slot ID :	N/A
Conductor ID :	CAPACITOR		
Exit :	11:00 - SHELL NOTCH	Length :	0.00
Color :	BROWN	Mat'l Spec :	18 2/64 THERMOPLAST
Termination :	.25 FQC	Slot ID :	N/A
Conductor ID :	CAPACITOR		
Exit :	11:00 - SHELL NOTCH	Length :	0.00
Color :	B/W	Mat'l Spec :	18 2/64 THERMOPLAST

Termination :	.25 FQC	Slot ID :	N/A
Conductor ID :	HI	Length :	31.00
Exit :	9:00 - CONDUIT CONN	Mat'l Spec :	18 2/64 THERMOPLAST
Color :	BLACK	Slot ID :	N/A
Termination :	.50 BWS	Length :	31.00
Conductor ID :	MED	Mat'l Spec :	18 2/64 THERMOPLAST
Exit :	9:00 - CONDUIT CONN	Slot ID :	N/A
Color :	BLUE		
Termination :	.50 BWS		

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

Grounding :

Type :	LEAD	Location :	6:00 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 THRMOPLAST

Diagrams and Dimensions :

Outline Drawing :	71870449R	C-Dimension :	20.82
Connection Diagram :	24B200217 Fig# 2	Connection Label :	NP24X350200

Notes :

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Date of last revision : **21-NOV-23**

