PRODUCT INFORMATION PACKET

Model No: 665A
Catalog No: 665A
Condenser Fan Motor, 1/3 HP, 1 Ph, 60 Hz, 208-230 V, 1625 RPM, 1 Speed, 48 Frame, SEMI ENCLOSED

Nameplate Specifications

Output HP	1/3 Hp	Output KW	0.25 kW
Frequency	60 Hz	Voltage	208-230 V
Current	1.9 A	Speed	1625 rpm
Service Factor	1	Phase	1
Duty	Air Over	Insulation Class	B
Frame	48Y	Enclosure	Semi Enclosed
Thermal Protection	Automatic	Ambient Temperature	60 °C
UL	Recognized	CSA	Y
CE	N	Number of Speeds	1

Technical Specifications

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Mounting	Resilient Ring/Extended Studs	Motor Orientation	Any
Drive End Bearing	Sleeve	Opp Drive End Bearing	Sleeve
Frame Material	Rolled Steel	Shaft Type	Double Flat
Overall Length	10.88 in	Frame Length	3.75 in
Shaft Diameter	0.500 in	Shaft Extension	6.0 in
Connection Drawing	614131-242	Outline Drawing	665A-S01

REV	ECO	REV BY	DATE	APPD	DATE
C	NMR-0217503	TRSK	11/9/2022	KEP	11/09/2022

GENERAL INFORMATION:

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

BEARINGS: BALL

MOUNTING POSITION: ALL ANGLE

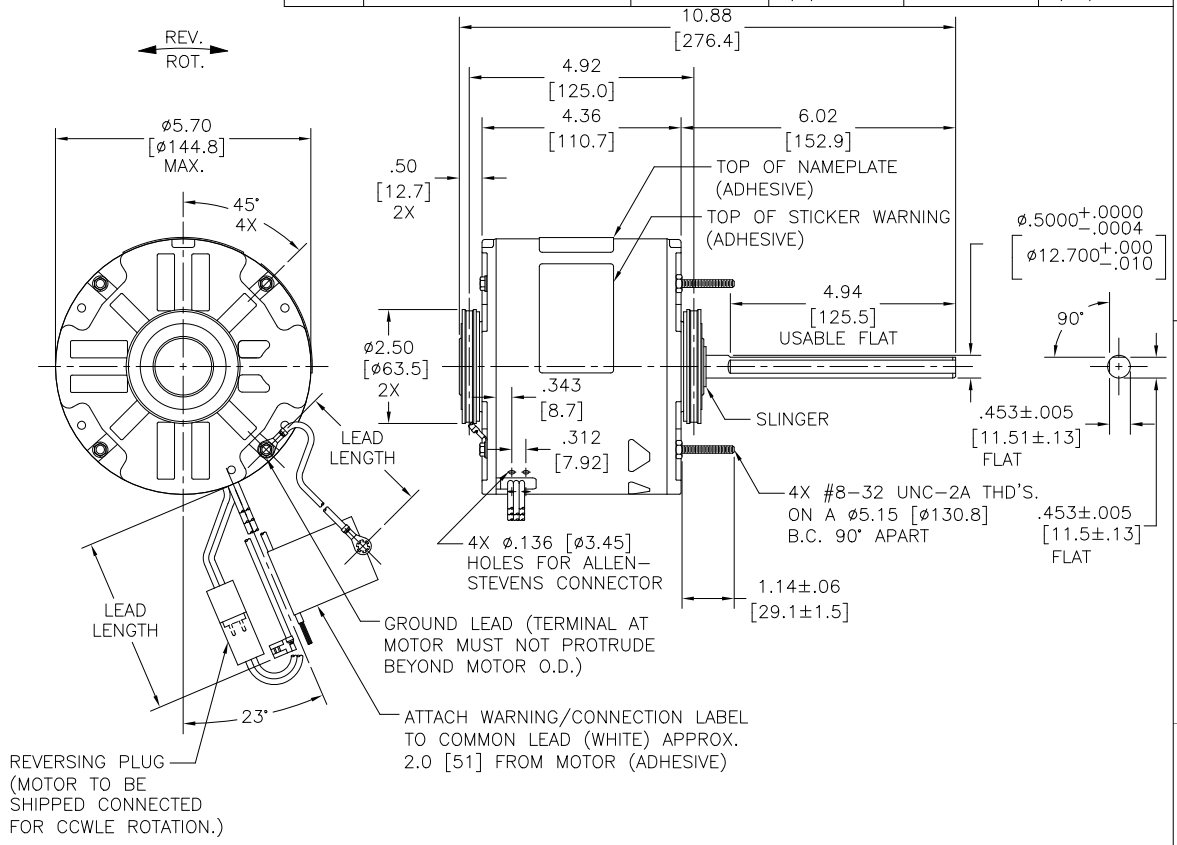
ELECTRICAL DATA:

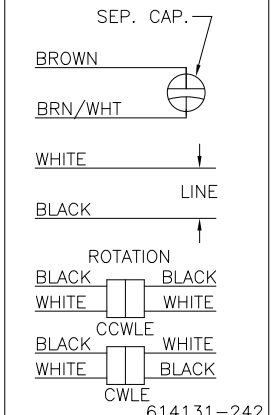
OVERLOAD PROTECTOR: AUTOMATIC RESET (T.I. 7AM 036)

LEADS: NO. 18 GA., .06 [1.5] THK. PVC 105°C INSUL.

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

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



NAMEPLATE DATA:	EXTERNAL CONNECTION DIAGRAM
MODEL NO.: F48Y42A01 CUST. P/N: 665A HP: 1/3 ROT.: REVERSIBLE RPM: 1625 TYPE: UF FRAME: 48Y VOLTS: 208-230 PH: 1 AMPS: 1.9 HZ: 60 INS.: B AMB.: 60° C DUTY: AIR OVER CAP.: 5 MFD/370 V ENCL: SEMI-ENCL. UL LOGO CSA LOGO THERMALLY PROTECTED	 614131-242

PERFORMANCE CURVE NO.	TORQUE @ 1625 RPM (25°C)	APPROVED SAMPLE	UL COMPONENT FILE #	UL COMPONENT CCN #	CSA FILE #	CSA CLASS #
C32621	19.9 OZ. FT.	0600698D	E46412	PRGY2	LR43341	4211-01

LEAD DATA		
GREEN/YELLOW (GROUND)	11.0/13.0 [279/330]	#10 EYELET
BLACK/WHITE	3.0/5.0 [76/127]	REVERSING PLUG
BROWN	37.0/39.0 [940/991]	.25 [6.4] FLAG
BROWN/WHITE	37.0/39.0 [940/991]	.25 [6.4] FLAG
WHITE	37.0/39.0 [940/991]	.50 [12.7] SKIN
BLACK	37.0/39.0 [940/991]	.50 [12.7] SKIN
COLOR	LENGTH	TERMINAL OR STRIP LENGTH

ENCLOSURE	
MAIN FRAME - OLE	SEMI-ENCL.
END FRAME - OLE	ENCLOSED
MAIN FRAME - LE	SEMI-ENCL.
END FRAME - LE	OPEN

CUSTOMER	DISTRIBUTION SERVICE

GEOMETRIC CHARACTERISTICS & SYMBOLS
- FLATNESS
- STRAIGHTNESS
- ANGULARITY
- PERPENDICULARITY (SQUARENESS)
- PARALLELISM
- ROUNDNESS (CIRCULARITY)
- CYLINDRICITY
- PROFILE OF ANY SURFACE
- PROFILE OF ANY LINE
- RUNOUT
- TRUE POSITION
- CONCENTRICITY
- SYMMETRY

ASME Y14.5M 1994

REGAL-BELOIT CORPORATION (RBC) PROVIDES TECHNICAL ASSISTANCE TO OUR CUSTOMERS IN SEVERAL AREAS. SINCE RBC DOES NOT RECEIVE ALL DATA CONCERNING THE USE AND APPLICATION OF THE MOTOR, THE SUITABILITY OF THE MOTOR FOR THE APPLICATION MUST BE DETERMINED BY THE CUSTOMER.

DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.

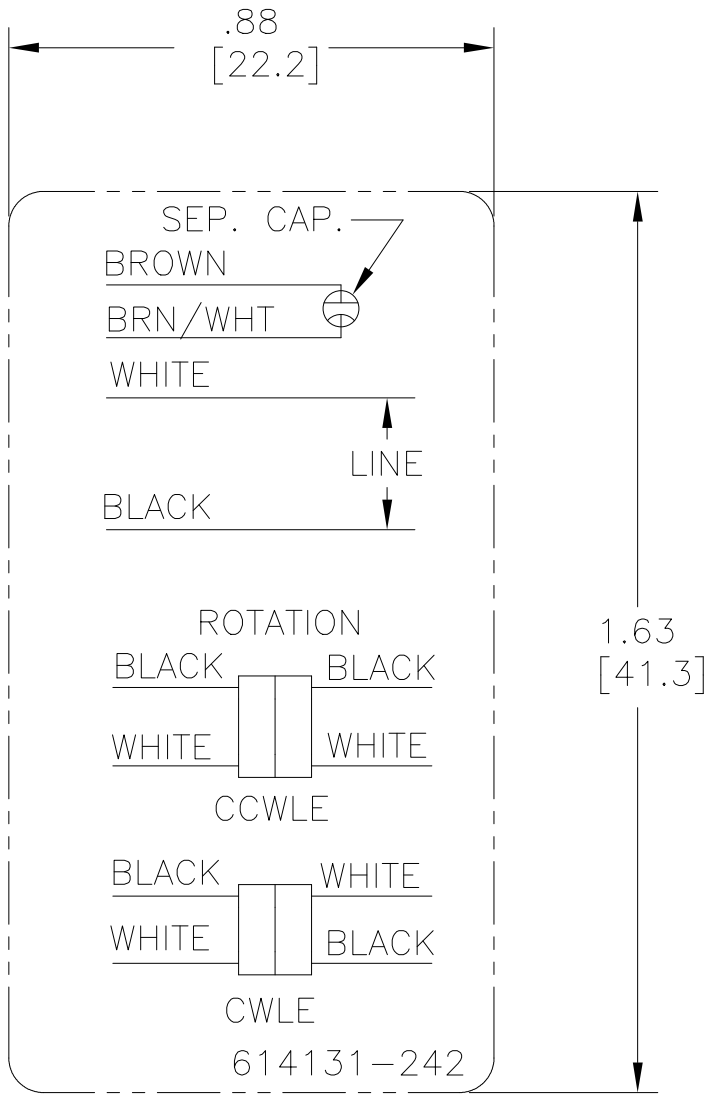
DR BY: J.RUPERT 05-12-2011
APPD: J.RUPERT 05-12-2011
THIRD ANGLE PROJECTION
EDS DATE 11-11-2011
FORMAT REV G

REGAL-BELOIT CORPORATION

DESCRIPTION: MODEL-RFHP-48FR OUTLINE

SIZE C | DWG NO 665A

SCALE NONE | SHEET 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	REVISION BY	DATE
H	J. RUPERT	03-16-2022
ECO	APPROVED BY	DATE
NMR-0213140	J. RUPERT	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 [.076/.381] X 45°
CORNER FILLETS R.02 [.51]
MACHINED SURFACES INCH 125 mm 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™ Regal Beloit America, Inc.

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL

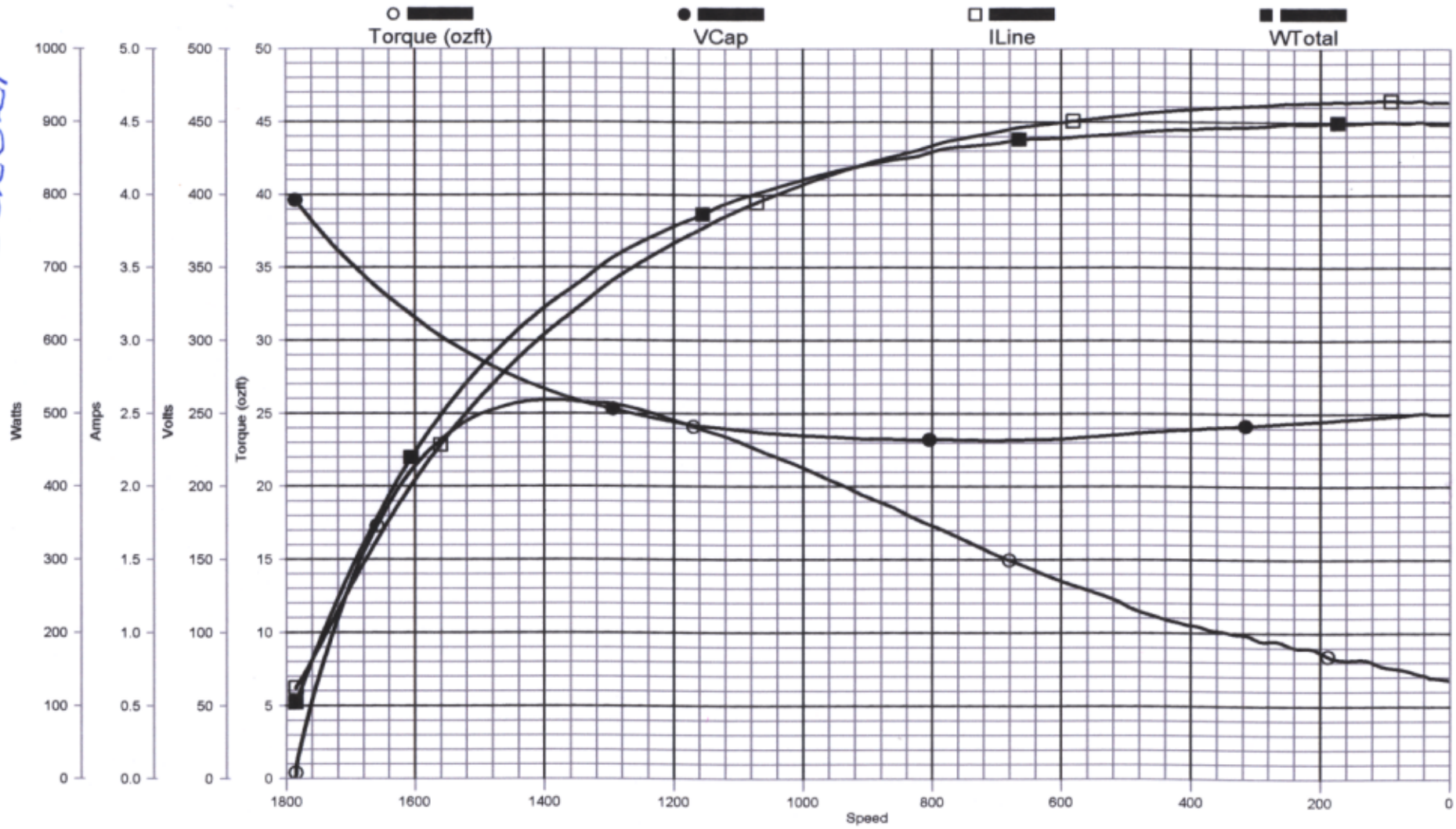
MATERIAL	PROCESS/FINISH
.	.

SIZE	DWG NO	SHEET
A	614131-242	1

C32621
F48Y42A01/665A

AO Smith

Performance Down Project: 0600698 (High Speed) Tuesday, September 26, 2006 05:52 PM



TRACKING #: 10049035
SBU: Heating & Air Cond
ENGINEER: JAMES PENG / TIM RILEY
TECHNICIAN: SCOTT FEBO
TORQUE CELL: 250-1 inlb
NP RPM: 1625
SPEEDS: 1
MOTOR #: 1
COMMENT 2:

CUSTOMER: DISTRIBUTION SERVICES
MODEL: 0600698D
FRAME: 48
PHASES: 1
VOLTS: 230.0
HERTZ: 60
RUN CAP: 5.00
COMMENT1:
COMMENT 3:

DESCRIPTION: 230V 60HZ MTR#1 SYNC-0
TYPE: PSC
BENCH: 1
HP: 0.33
ROTATION: CW
BDT: 25.89
LRA: 4.64
LRT: 6.79
COMMENT 4:

C32621

C32621

AO Smith

Performance Test Results For 0600698 (High Speed) 09-26-2006 05:52 pm

TRACKING #: 10049035
SBU: Heating & Air Cond
ENGINEER: JAMES PENG / TIM RILEY
TECHNICIAN: SCOTT FEBO
TORQUE CELL: 250-1 inlb
NP RPM: 1625
SPEEDS: 1
MOTOR #: 1
COMMENT 2:

CUSTOMER: DISTRIBUTION SERVICES
MODEL: 0600698D
FRAME: 48
PHASES: 1
VOLTS: 230.0
HERTZ: 60
RUN CAP: 5.00
COMMENT1:
COMMENT 3:

DESCRIPTION: 230V 60HZ MTR#1 SYNC-0
TYPE: PSC
BENCH: 1
HP: 0.33
ROTATION: CW
BDT: 25.89
LRA: 4.64
LRT: 6.79
COMMENT 4:

Resistance:

	Start 03-02	Main1 01-02	
Spec	10.00	0.00	
Before	56.995	14.635	@22.8 °C
After	57.966	15.108	@22.8 °C

Friction: -1.1702 ozft @ 200 RPM
Friction + Wind: -1.5819 ozft @ 1620 RPM
Inertia: 0.0207 ozft

Down Test Results (Torque In ozft):

% Load	Torque	RPM	VLine	VCap	VStart	ILine	IMain	IStart	WLine	WOut	% Eff	% PF	HP
NL	0.00	1785.1	229.7	396.3	308.1	0.62	0.92	0.75	101.7	0.0	0.0	71.4	0.00
50%	8.19	1740.7	229.5	372.1	290.8	0.97	0.91	0.71	203.4	126.5	62.2	91.4	0.17
70%	11.46	1716.1	229.5	360.1	281.7	1.18	1.02	0.68	253.6	174.5	68.8	93.6	0.23
75%	12.28	1709.4	229.6	357.2	279.5	1.23	1.06	0.68	266.6	186.3	69.9	94.4	0.25
NP-50*	15.91	1675.0	229.8	342.7	267.6	1.51	1.28	0.65	329.4	236.5	71.8	94.9	0.32
FL	16.37	1669.8	229.8	340.6	265.8	1.55	1.32	0.65	338.2	242.6	71.7	94.9	0.33
105%	17.19	1660.2	229.8	336.7	262.5	1.62	1.39	0.64	354.4	253.3	71.5	95.2	0.34
110%	18.01	1650.1	229.9	332.9	259.1	1.70	1.46	0.63	371.1	263.7	71.1	95.0	0.35
NP-25*	18.01	1650.0	229.9	332.9	259.1	1.70	1.46	0.63	371.2	263.7	71.0	95.0	0.35
115%	18.83	1639.6	230.2	329.2	255.8	1.77	1.53	0.63	388.1	274.0	70.6	95.3	0.37
120%	19.64	1628.5	230.4	325.5	252.3	1.85	1.61	0.62	405.7	283.8	70.0	95.2	0.38
NP	19.89	1625.0	230.5	324.3	251.2	1.87	1.64	0.62	411.0	286.8	69.8	95.4	0.38
125%	20.46	1616.0	230.6	321.3	248.4	1.94	1.70	0.61	424.3	293.4	69.2	94.8	0.39
130%	21.28	1601.9	230.6	316.4	243.7	2.03	1.80	0.60	444.3	302.5	68.1	94.9	0.41
NP+25*	21.38	1600.0	230.5	315.7	243.1	2.04	1.81	0.60	446.9	303.6	67.9	95.0	0.41
135%	22.10	1585.7	230.4	310.7	238.3	2.13	1.91	0.59	466.0	311.0	66.7	95.0	0.42
NP+50*	22.57	1575.0	230.3	307.2	234.8	2.20	1.98	0.58	479.3	315.5	65.8	94.6	0.42
150%	24.56	1516.9	230.3	291.3	218.1	2.52	2.33	0.55	545.1	330.6	60.6	93.9	0.44
MT	25.89	1385.8	229.7	264.3	185.1	3.09	2.97	0.50	653.9	318.4	48.7	92.1	0.43
BDT	25.89	1385.8	229.7	264.3	185.1	3.09	2.97	0.50	653.9	318.4	48.7	92.1	0.43
1200	24.52	1200.0	230.0	244.3	149.9	3.66	3.62	0.46	756.0	261.1	34.5	89.8	0.35
HS	19.26	900.0	230.0	232.6	109.4	4.21	4.28	0.44	841.0	153.8	18.3	86.9	0.21
600	13.53	600.0	230.1	232.6	78.1	4.49	4.63	0.44	877.5	72.0	8.2	84.9	0.10
300	9.57	300.0	230.0	241.8	58.0	4.61	4.80	0.46	893.3	25.5	2.9	84.2	0.03
60	7.34	60.0	230.1	249.2	46.5	4.64	4.86	0.47	898.4	3.9	0.4	84.1	0.01
LR	6.79	0.0	229.8	249.3	44.6	4.64	4.86	0.47	896.5	0.0	0.0	84.1	0.00
PUT	6.79	0.0	229.8	249.3	44.6	4.64	4.86	0.47	896.5	0.0	0.0	84.1	0.00

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

AO Smith

Manual Test Results For 0600698 (High Speed)

09-26-2006
05:48 pm

TRACKING #:	10049035	CUSTOMER:	DISTRIBUTION SERVICES	DESCRIPTION:	230V 60HZ MTR#1 IDLES
SBU:	Heating & Air Cond	MODEL:	0600698D	TYPE:	PSC
ENGINEER:	JAMES PENG / TIM RILEY	FRAME:	48	BENCH:	1
TECHNICIAN:	SCOTT FEBO	PHASES:	1	HP:	0.33
TORQUE CELL:		VOLTS:	230.0	ROTATION:	CW
NP RPM:	1625	HERTZ:	60	BDT:	0.00
# SPEEDS:	1	RUN CAP:	5.00	LRA:	0.00
MOTOR #:	1	COMMENT1:		LRT:	0.00
COMMENT 2:		COMMENT 3:		COMMENT 4:	

Resistance:

	Start 03-02	Main1 01-02	
Spec	10.00	0.00	
Results	56.846	14.582	@22.9 °C

VLine	VStart	VCap	ILine	IMain	IStart	WLine	TC01	TC02	TC03	TC04	Time
230.1	307.1	394.3	0.64	0.93	0.75	106.9	OPEN	OPEN	OPEN	OPEN	05:47:28 pm
208.1	281.2	358.0	0.52	0.75	0.68	85.3	OPEN	OPEN	OPEN	OPEN	05:47:43 pm

Specification & Rating Report

Item Number: **665A**

Specification Number: **1**

Model Number:	**F48Y42A01**	Sample Number:	
Carton Label Model Number:		Customer Specification Number:	
Customer Model Number:		Catalog Number:	**665A**
Agency Type:			
CE:	**N**	CE Number:	
CSA:	**Y**	CSA Number:	**NO**
UL:	**Y**	UL Number:	**NO**
UL Explosion Proof Rating:			
Cubic Feet Per Minute:			
F2 Assembly:			
UPC Model Number:		UPC Catalog Number:	**786674010520**
Nameplate Drive Bearing Type:		Label Drive Bearing Type:	**BALL**
Nameplate Opposite Drive Bearing Type:		Label Opposite Drive Bearing Type:	**BALL**
Capacitor:		Capacitor Included:	**N**
Capacitor Rating MFD:	**5**	Capacitor Rating VAC:	**370**
Control Code:		Design Status:	
DC Design Number:		Features:	
Form Factor:			
Connection Diagram:		Installation Diagram:	
Lubrication Label Diagram:		Warning Label Diagram:	
Outline Diagram:	**665A-S01**	Outline Graphic:	**83A**
Ambient Temperature:	**60**	Insulation Class:	**B**

Specification & Rating Report

Protector:	**AUTOMATIC**	Thermal Protection:	
Nameplate Overload:		Label Overload:	
IP Code:			
Nameplate Enclosure:	**SEMI ENCL**	Label Enclosure:	**SEMI ENCL**
Frame Length:	**3.75**	Frame Length UOM:	
Frame Diameter:		Frame Diameter UOM:	
Frame Size:	**48Y**		
Frame Material:	**ROLLED STEEL**	End Frame Material:	
Operator Instruction Manual:			
Nameplate Mounting:		Label Mounting:	**STUD/RESILIENT RING**
Base Height:		Base Height UOM:	
Ring Diameter:		RingDiameterUOM:	
Nameplate:		Carton Label:	
Namplate Location Format:	**L**		
Brake:		Tachometer:	
Layer Quantity:		Pallet Quantity:	
Phase:	**1**	CurrentType:	
DC Pole:			
Poles:	**4**		
Speeds:	**1**		
Duty:	**AIR OVER**		
Shaft Diameter:	**.5**	Shaft Diameter UOM:	**INCH**
Shaft Extension:	**6.0**	Shaft Extension UOM:	**IN**
Shaft Material:		Rotation:	**REV**
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:	**PERMANENT SPLIT CAPACITOR**
Label Text 2:	
Label Text 3:	**CONDENSER FAN MOTOR**
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:	**1/3**	Customer Nameplate Number:	
Volts:	**208-230**	Kilowatts:	
Hertz:	**60**	Amps:	**1.9**
Field Current:		Maximum Amps:	
Revolutions Per Minute:	**1625**	Armature Current:	
Service Factor:	**1.0**	Power Factor:	
Service Factor Amps:		Service Factor Volts:	
NEMA Code:		NEMA Nominal Efficiency:	**70**
NEMA Design:		NEMA Guaranteed Efficiency:	