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# Customer information packet

## CFM3166A

1.5HP AIROVER, 1140RPM, 3PH, 60HZ, 56YZ, OPAO

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPAO
Frame	56YZ
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA UR
Ambient Temperature	60 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	5.500 A @ 208.0 V 5.000 A @ 230.0 V 2.500 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	76.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

## Part detail

Revision	AT
Type	AC
Mech. spec.	35K306
Base	
Status	PRD/A
Elec. spec.	35WGY797
Layout	35LYK306
Eff. date	09-17-2023
CD Diagram	CD0007
Poles	06
Leads	12#18
Proprietary	False
Created date	01-01-0001

Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Terminal Panel
Motor Lead Quantity/Wire Size	12 @ 18 AWG
Motor Lead Termination	None
Motor Standards	NEMA
Motor Type	3534M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	17.43 IN
Power Factor	72
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Resilient Mount
Pulley Shaft Indicator	Key And Flat
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1140 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Do Not Use Eve-Not Valid
Vibration Sensor Indicator	No Vibration Sensor

<b>Winding Thermal 1</b>	<b>Automatic Thermal Overload</b>
<b>Winding Thermal 1 Location</b>	<b>SB</b>
<b>Winding Thermal 2</b>	<b>None</b>

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**Nameplate**

<b>NP1257L</b>									
<b>CAT.NO.</b>	CFM3166A								
<b>SPEC.</b>	35K306Y797								
<b>HP</b>	1.5 AIR OVER								
<b>VOLTS</b>	208-230/460								
<b>AMP</b>	5.5-5/2.5								
<b>RPM</b>	1140								
<b>FRAME</b>	56YZ		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.15	<b>CODE</b>	J	<b>DES</b>	B	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	76	<b>PF</b>	72						
<b>RATING</b>	60C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6203	<b>ODE</b>	6205						
<b>ENCL</b>	OPAO	<b>SN</b>							

**AC Induction Motor Performance Data**

Record # 61269

Typical performance - not guaranteed values

Winding: 35WGY797-R003		Type: 3534M	Enclosure: OPAO	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	1.5 AIR OVER	Full Load Torque	6.8 LB-FT	
Volts	208-230/460	Start Configuration	direct on line	
Full Load Amps	5.5-5/2.5	Breakdown Torque	22.97 LB-FT	
R.P.M.	1140	Pull-up Torque	16.04 LB-FT	
Hz	60 Phase	Locked-rotor Torque	20.05 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	14.97 A	
Service Factor (S.F.)	1.15	No-load Current	1.5 A	
NEMA Nom. Eff.	76 Power Factor	Line-line Res. @ 25°C	13.7 Ω	
Rating - Duty	60C AMB-CONT	Temp. Rise @ Rated Load	54°C	
S.F. Amps		Temp. Rise @ S.F. Load	66°C	
		Locked-rotor Power Factor	57	
		Rotor inertia	0.202 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	52	64	73	75	77	78
Efficiency	63.9	75	78	78.5	76.9	74.9	77.6
Speed	1183	1168	1152	1133	1110	1084	1120
Line amperes	1.61	1.8	2.1	2.4	2.91	3.41	2.7

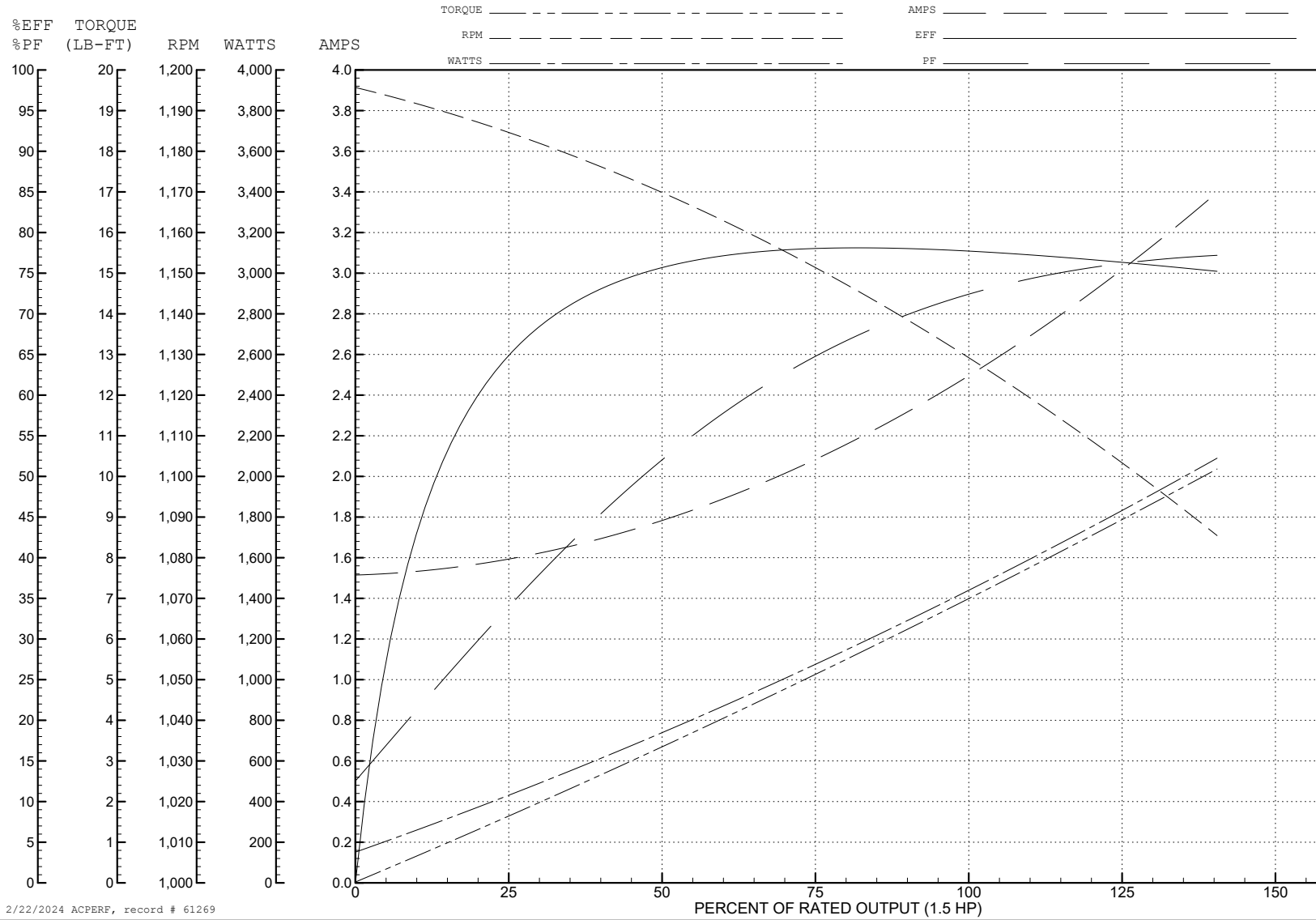
ABB Motors and Mechanical Inc.

WINDING # 35WGY797

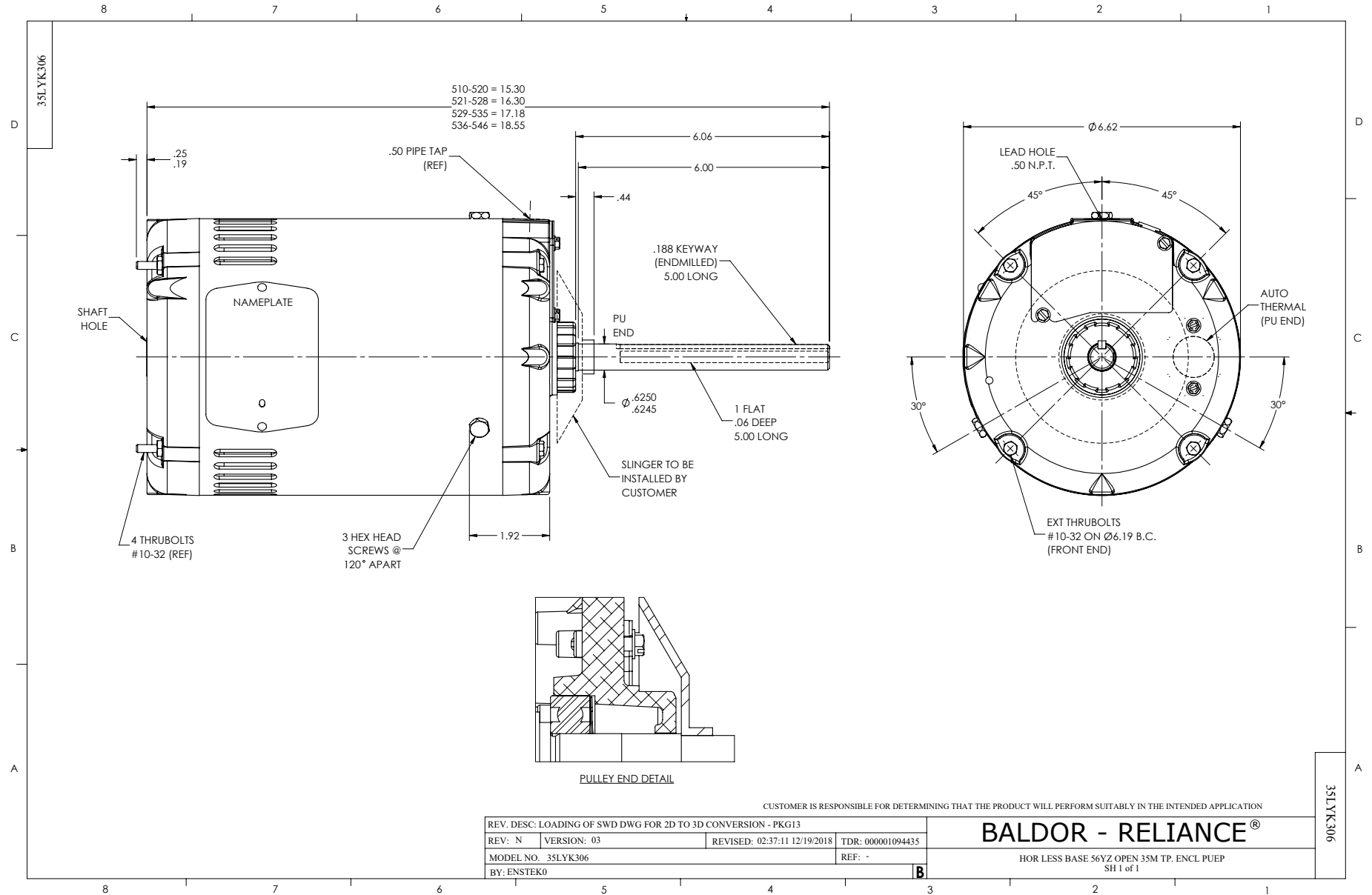
Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1140 RPM 460 V 3534M

TORQUES (LB-FT): PO=22.97 PU=16.04 LR=20.05 LRA=14.97

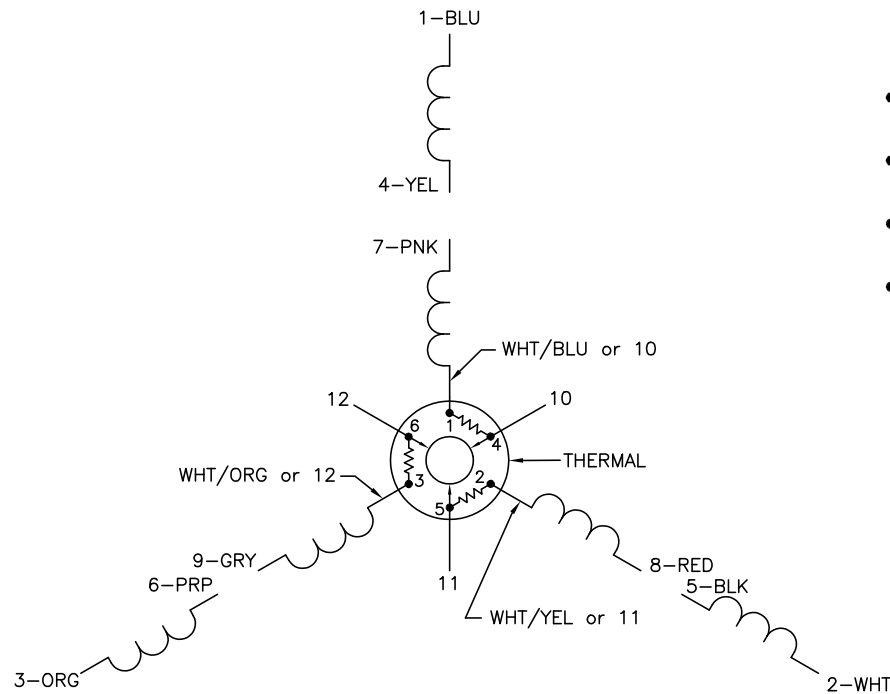


2/22/2024 ACPERF, record # 61269

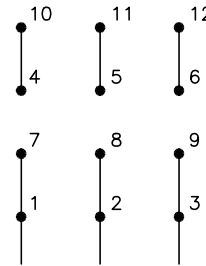




CD0007

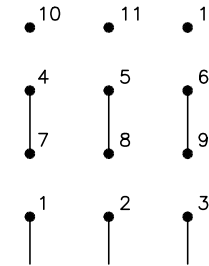


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0007

REV. DESC: ADDED "CK" PLANT CODE			
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
L00000		FILE: AAA00008370	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, THERMAL, 12 LEADS