ABB BALDOR RELIANCE

Customer information packet

CFM3166A

1.5 AIR OVERHP, 1140RPM, 3PH, 60HZ, 56YZ, 353
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPAO
Frame	56YZ
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ
	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	C UR US
Ambient Temperature	60 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.500 A @ 460.0 V
	5.000 A @ 230.0 V
	5.500 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a

Part Detail

Revision	A
Type	AC
Mech. spec.	35K306
Base	
Status	PRD/A
Elec. spec.	35WGK893
Layout	35LYK306
Eff. date	02-21-2025
CD Diagram	CD0007
Poles	06
Leads	12#18
Proprietary	False
Created date	11-19-2024

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	12 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3534M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	17.18 IN
Power Factor	75
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Other
Pulley Shaft Indicator	Key And Flat
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
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 Valiid
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Automatic Thermal Overload
Winding Thermal 1 Location	ES
Winding Thermal 2	None

Nameplate

NP1257L									
CAT.NO.	CFM3166A								
SPEC.	35K306K893								
HP	1.5 AIR OVER								
VOLTS	208-230/460								
AMP	5.5-5/2.5								
RPM	1140								
FRAME	56YZ		**HZ**	60		**PH**	3		
SER.F.	1.15	**CODE**	G	**DES**	B	**CL**	F		
NEMA-NOM-EFF	74	**PF**	75						
RATING	60C AMB-CONT								
CC									
DE	6203	**ODE**	6205						
ENCL	OPAO	**SN**							

AC Induction Motor Performance Data
Record # 110952
Typical performance - not guaranteed values

Winding: 35WGK893-R001	**Type:** 3534M	**Enclosure:** OPAO

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5 AIR OVER	**Full Load Torque**	6.848 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			5.5-5/2.5	**Breakdown Torque**	16 LB-FT
R.P.M.			1140	**Pull-up Torque**	11.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	14.6 LB-FT
NEMA Design Code	B	**KVA Code**	J	**Starting Current**	11.1 A
Service Factor (S.F.)			1.15	**No-load Current**	1.31 A
NEMA Nom. Eff.	76	**Power Factor**	72	**Line-line Res. @ 25ºC**	19.21 Ω
Rating - Duty			60C AMB-CONT	**Temp. Rise @ Rated Load**	61°C
S.F. Amps				**Temp. Rise @ S.F. Load**	79°C
				Locked-rotor Power Factor	60.2
				Rotor inertia	0.246 lb-ft²

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	38	57	68	75	79	82	77
Efficiency	68	75.7	76.7	75.4	71.4	65.2	73
Speed	1185.5	1171.3	1155.1	1136.7	1109.7	1070.8	1120
Line amperes	1.43	1.68	2.03	2.46	3.02	3.72	2.8

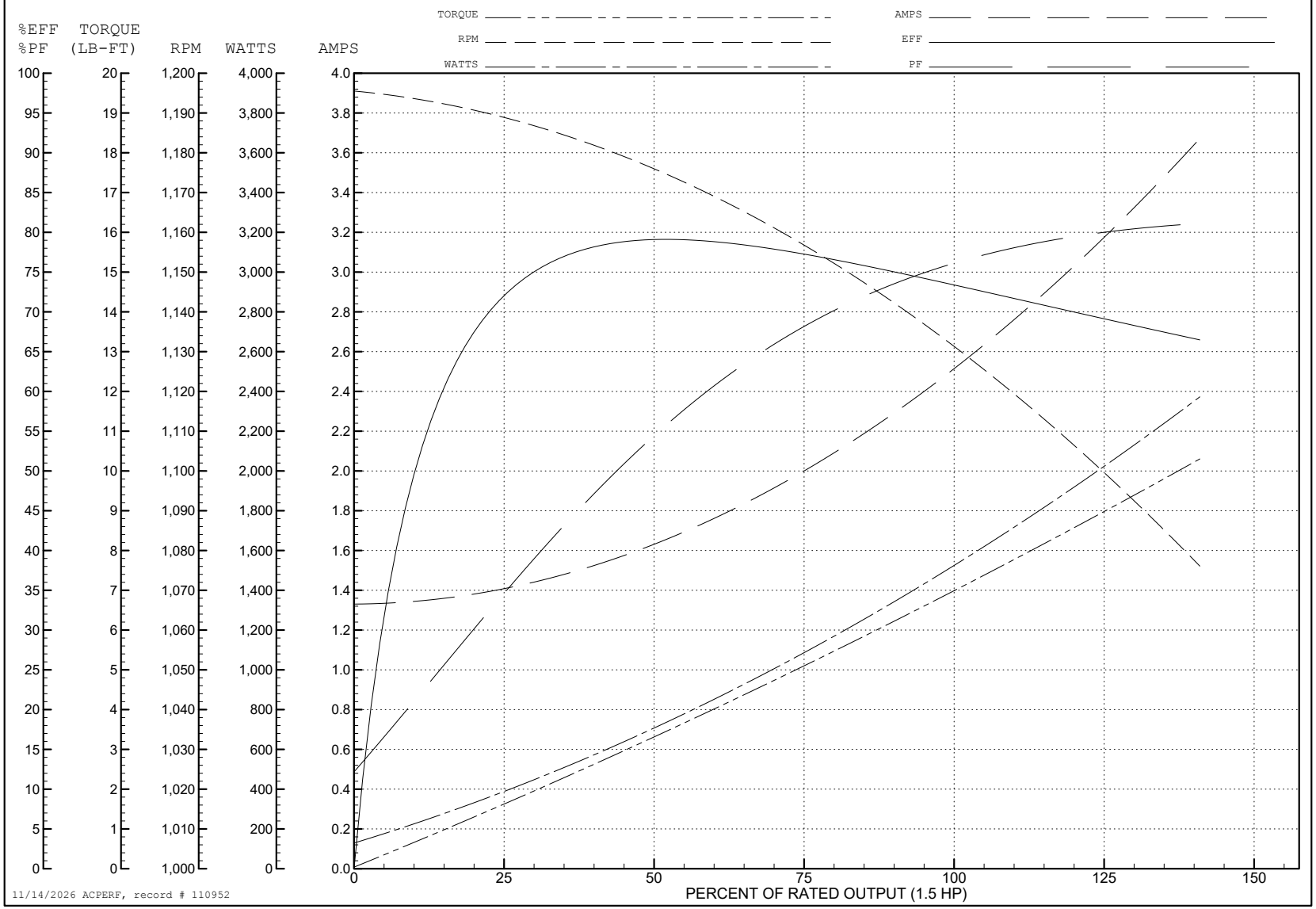
ABB Motors and Mechanical Inc.

WINDING # 35WGK893

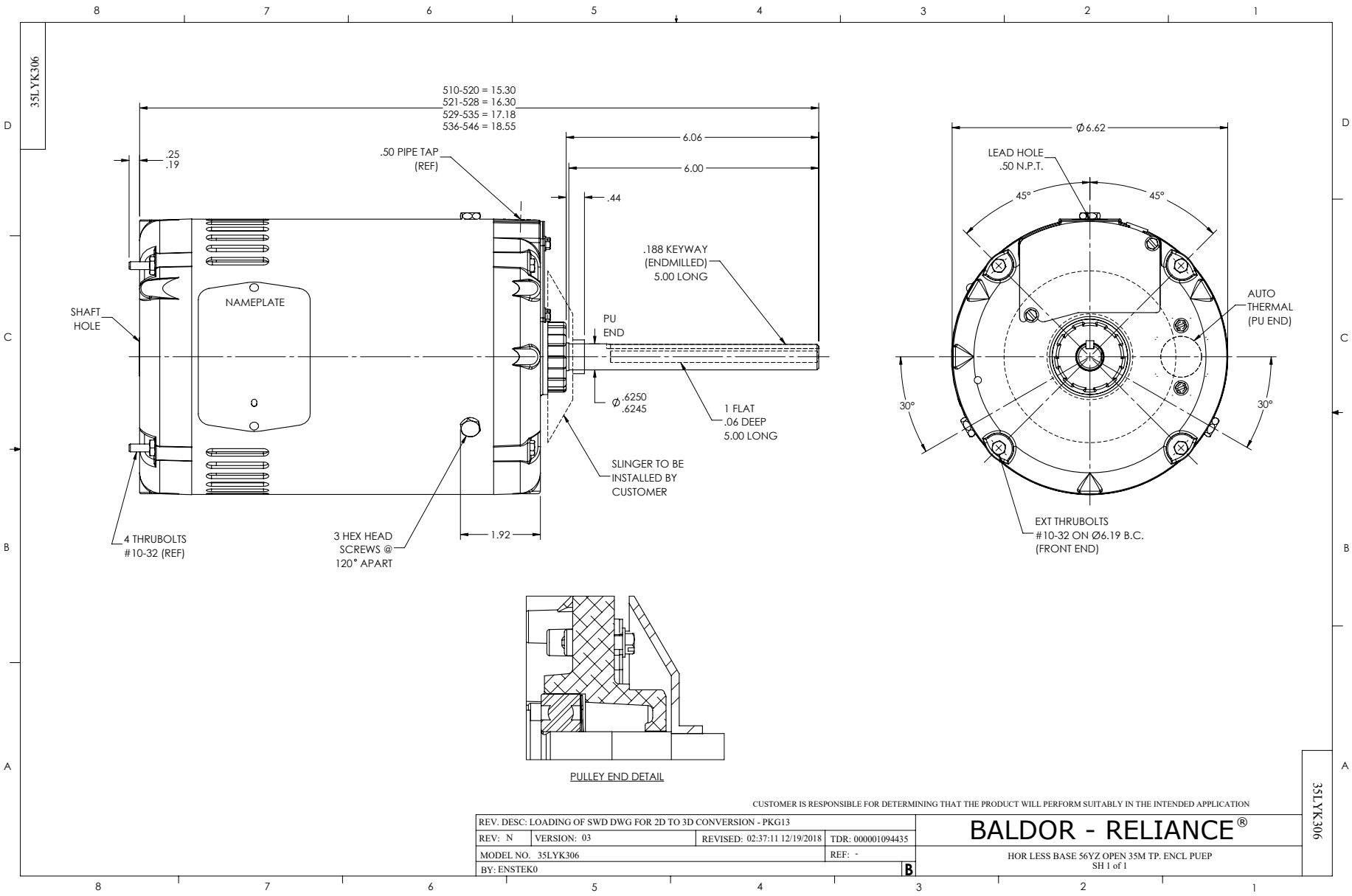
1.5 HP 3 PH 60 HZ 1140 RPM 460 V 3534M

Typical performance - not guaranteed values.

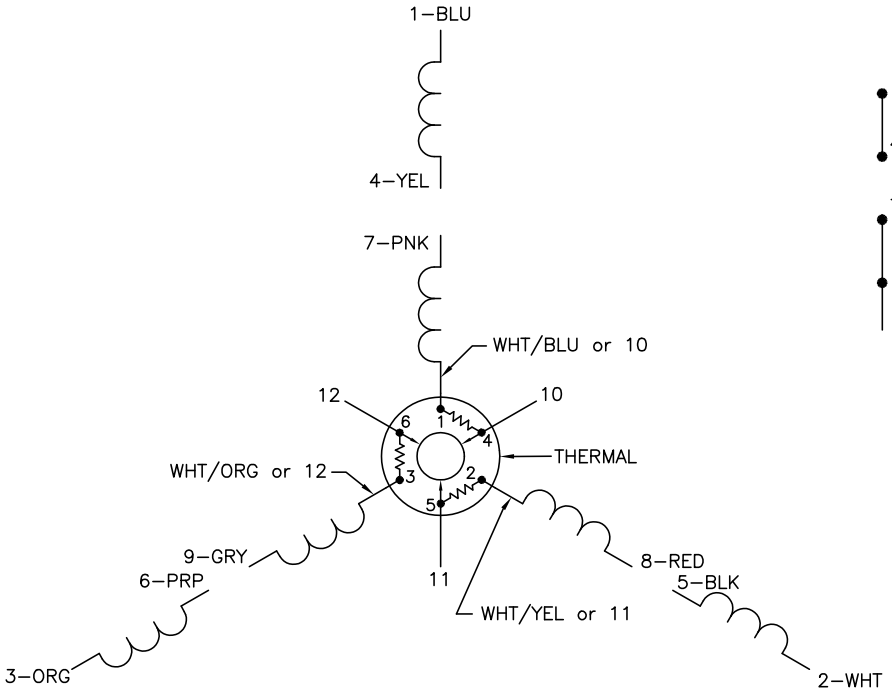
TORQUES(LB-FT): PO=16 PU=11.1 LR=14.6 LRA=11.1

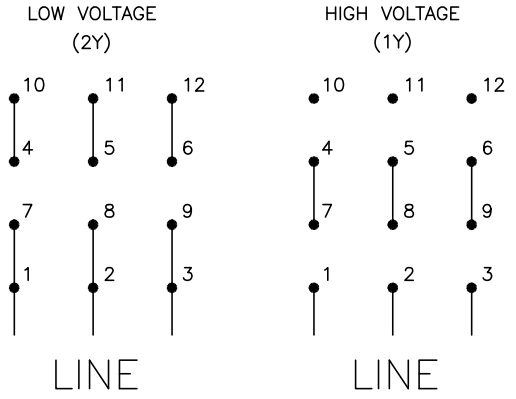


11/14/2026 ACPERF, record # 110952


35LYK306
510-520 = 15.30
521-528 = 16.30
529-535 = 17.18
536-546 = 18.55
6.06
6.00
.44
.25
.19
.50 PIPE TAP
(REF)
.188 KEYWAY
(ENDMILLED)
5.00 LONG
NAMEPLATE
SHAFT
HOLE
PU
END
Ø .6250
.6245
1 FLAT
.06 DEEP
5.00 LONG
SLINGER TO BE
INSTALLED BY
CUSTOMER
4 THRUBOLTS
#10-32 (REF)
3 HEX HEAD
SCREWS @
120° APART
1.92
Ø6.62
LEAD HOLE
.50 N.P.T.
45°
45°
AUTO
THERMAL
(PU END)
30°
30°
EXT THRUBOLTS
#10-32 ON Ø6.19 B.C.
(FRONT END)
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION - PKG13
REV: N
VERSION: 03
REVISED: 02:37:11 12/19/2018
TDR: 000001094435
MODEL NO. 35LYK306
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
HOR LESS BASE 56YZ OPEN 35M TP. ENCL PUEP
SH 1 of 1
35LYK306

CD0007





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.

REV. DESC: ADDED "CK" PLANT CODE			BALDOR ELECTRIC Co.
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
CD0007		FILE: AAA00008370	MDL: –
		MTL: –	3PH, DV, THERMAL, 12 LEADS

CD0007