

ABB BALDOR RELIANCE III

Customer information packet

CFM3166A

1.5 AIR OVERHP, 1140RPM, 3PH, 60HZ, 56YZ, 353

Class - None

Division - Not Applicable

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 Valid
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	Starting Current		11.1 A	
Service Factor (S.F.)		1.15	No-load Current		1.31 A	
NEMA Nom. Eff.		76 Power Factor	Line-line Res. @ 25°C		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

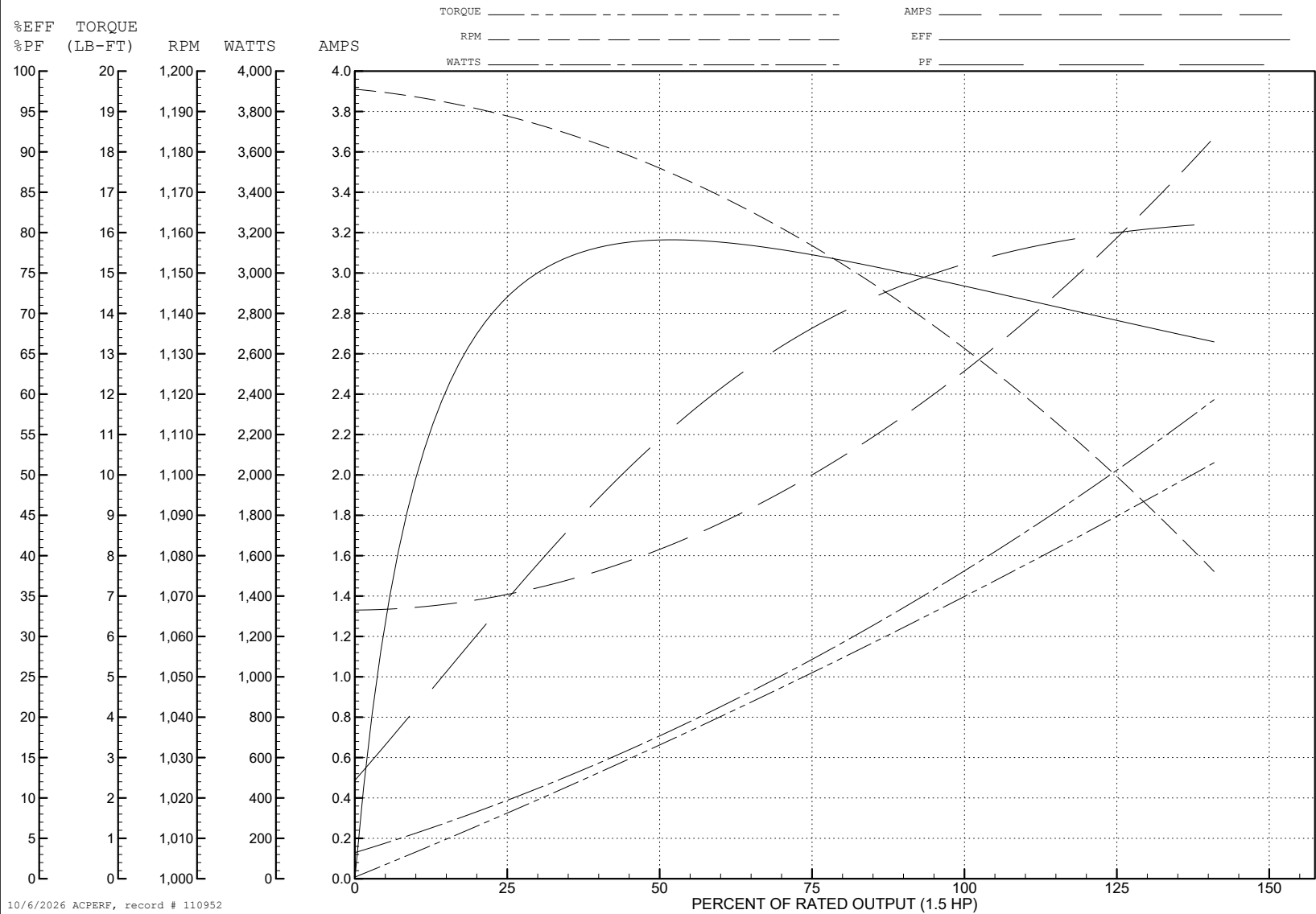
ABB Motors and Mechanical Inc.

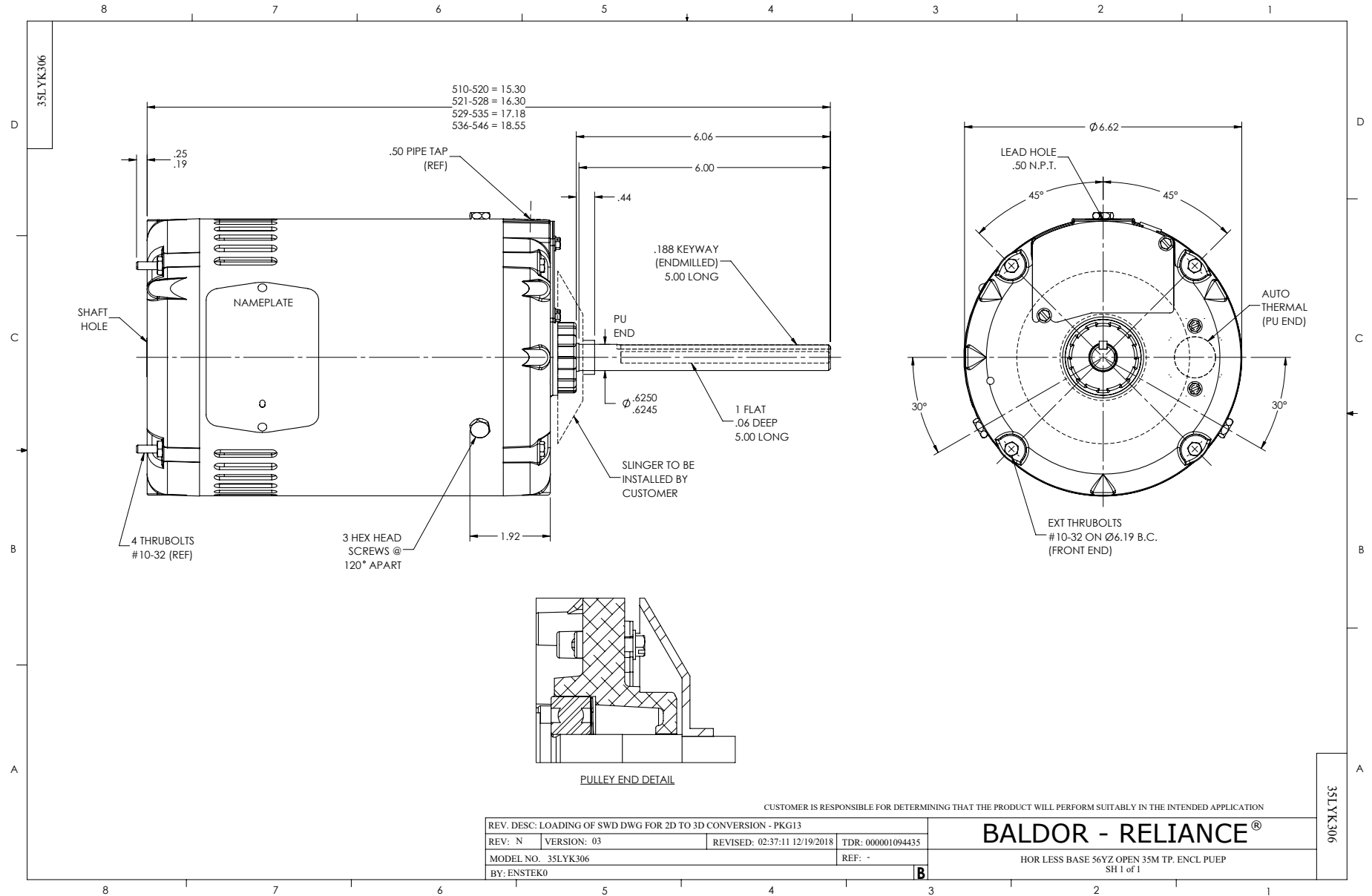
WINDING # 35WGK893

Typical performance - not guaranteed values.

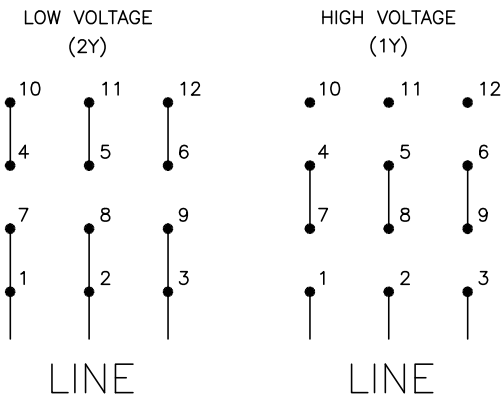
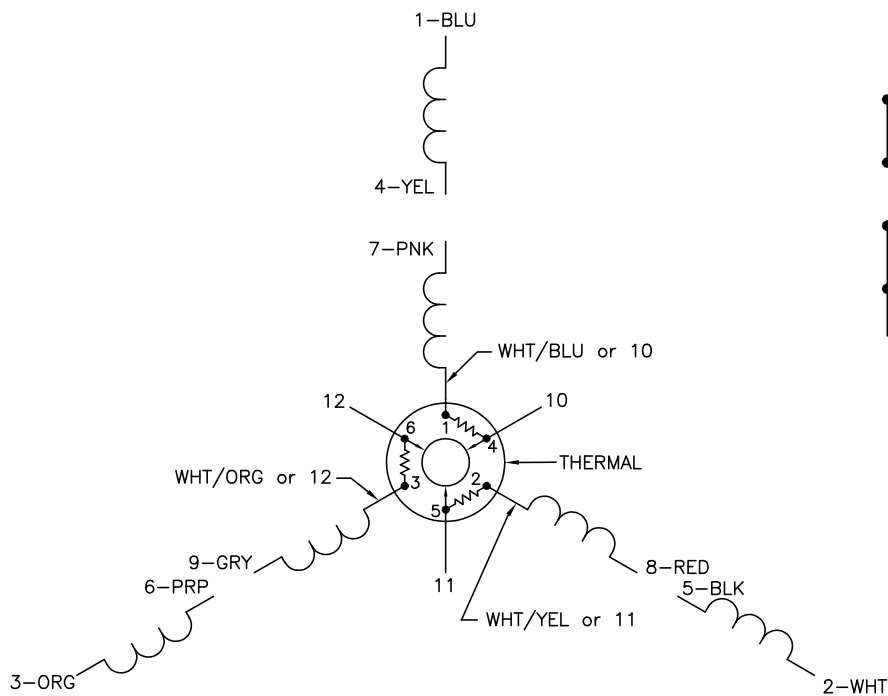
1.5 HP 3 PH 60 HZ 1140 RPM 460 V 3534M

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





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.

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