

ABB BALDOR RELIANCE III

Customer information packet

CEM31115

1HP, 3500RPM, 3PH, 60HZ, 56C, 3512M, OPSB, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	56C
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.450 A @ 460.0 V 2.900 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGP987
Layout	35LYQ392
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	03-09-2020

IP Rating	NONE
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.07 IN
Power Factor	80
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3500 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1259L									
CAT.NO.	CEM31115								
SPEC.	35-0000-0670								
HP	1								
VOLTS	230/460								
AMP	2.9/1.45								
RPM	3500								
FRAME	56C		HZ	60			PH	3	
SER.F.	1.15		CODE	K	DES	B	CL	F	
NEMA-NOM-EFF	78.5		PF	80					
RATING	40C AMB-CONT								
CC	010A								
DE	6205		ODE	6203					
ENCL	OPSB		SN						

Parts List

Part number	Description	Quantity
SA379817	SA 35-0000-0670	1.000 ea
RA369843	RA 35-0000-0670	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
35EP3209G00	MASTER ODE,203 BRG	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3402C00	MASTER DE,205 BRG,OPEN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35AD2005B01	BAFFLE PLATE,MOD 35-SLTD BAND MTR TDR	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
35AD2005B01	BAFFLE PLATE,MOD 35-SLTD BAND MTR TDR	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 81829

Typical performance - not guaranteed values

Winding: 35WGP987-R009		Type: 3512M	Enclosure: OPEN
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1	Full Load Torque	1.47 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	2.9/1.45	Breakdown Torque	6.11 LB-FT
R.P.M.	3500	Pull-up Torque	2.3 LB-FT
Hz	60 Phase	Locked-rotor Torque	3.86 LB-FT
NEMA Design Code	B KVA Code	Starting Current	10.8 A
Service Factor (S.F.)	1.15	No-load Current	0.883 A
NEMA Nom. Eff.	78.5 Power Factor	Line-line Res. @ 25°C	19.3 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	31°C
S.F. Amps		Temp. Rise @ S.F. Load	35°C
		Locked-rotor Power Factor	66
		Rotor inertia	0.0332 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	58	72	80	85	88	83
Efficiency	62.2	74.4	78.5	79.2	79.4	78.1	79.3
Speed	3575	3552	3527	3499	3464	3429	3478
Line amperes	0.931	1.04	1.22	1.44	1.72	2.03	1.61

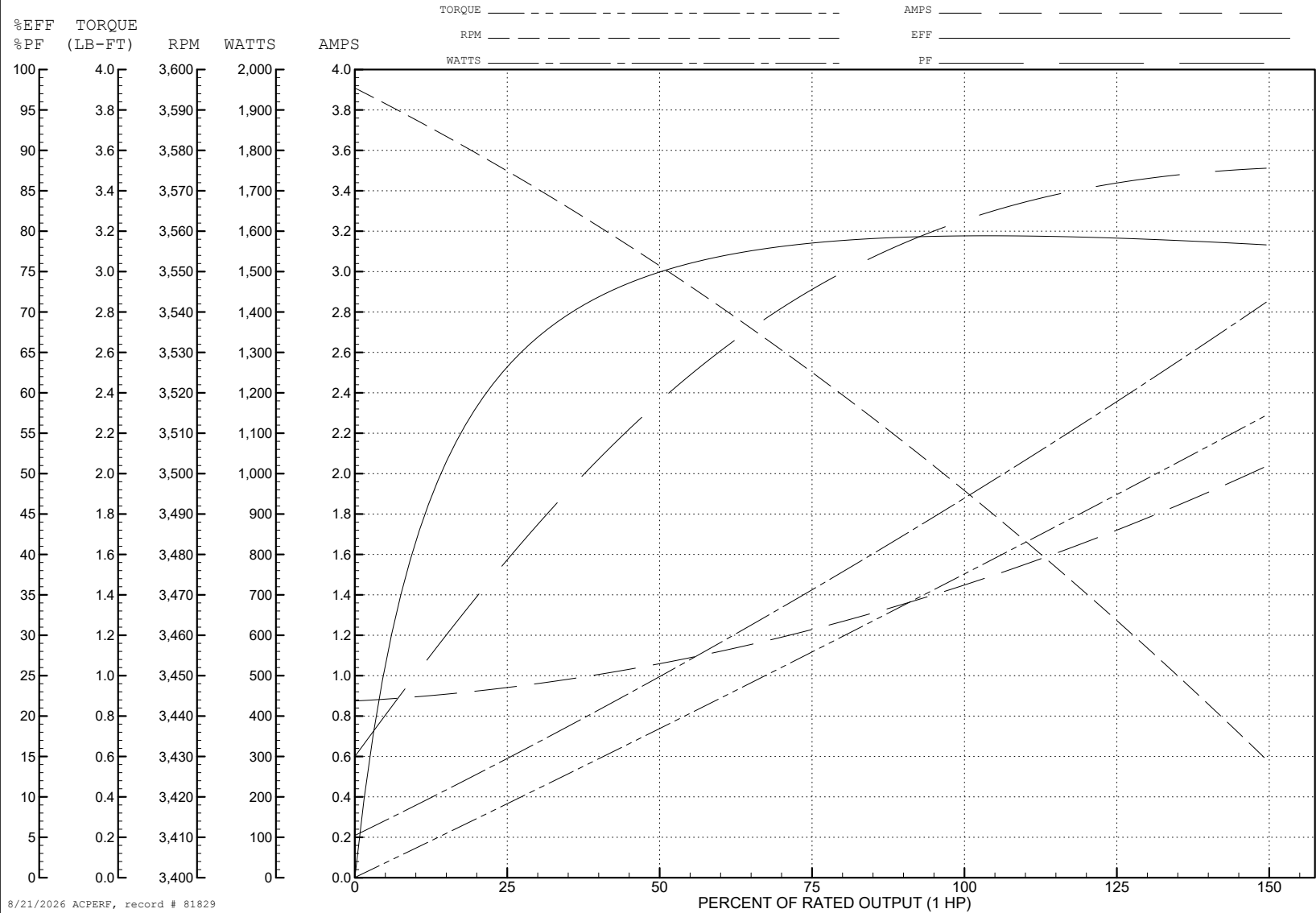
ABB Motors and Mechanical Inc.

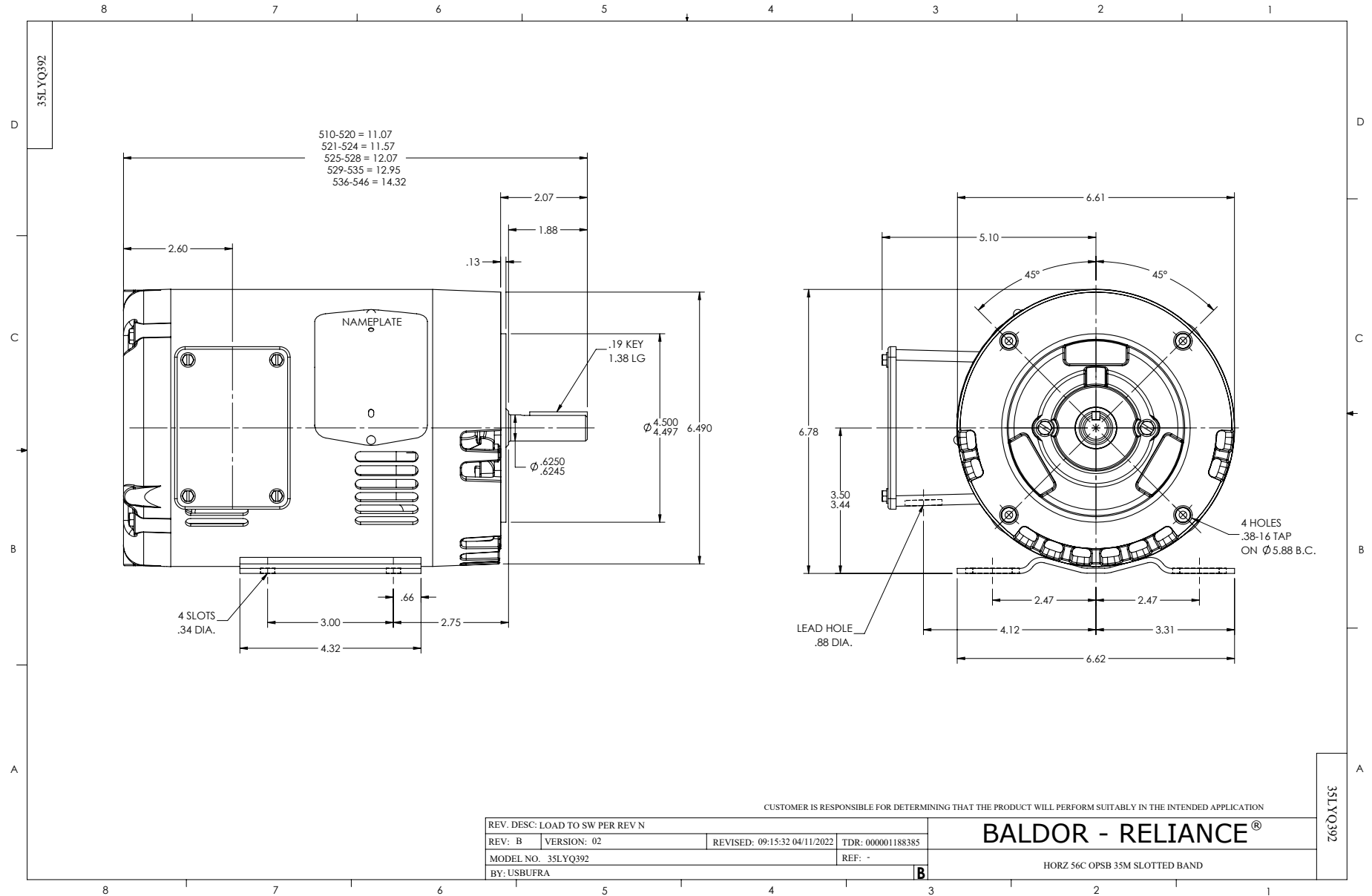
WINDING # 35WGP987

Typical performance - not guaranteed values.

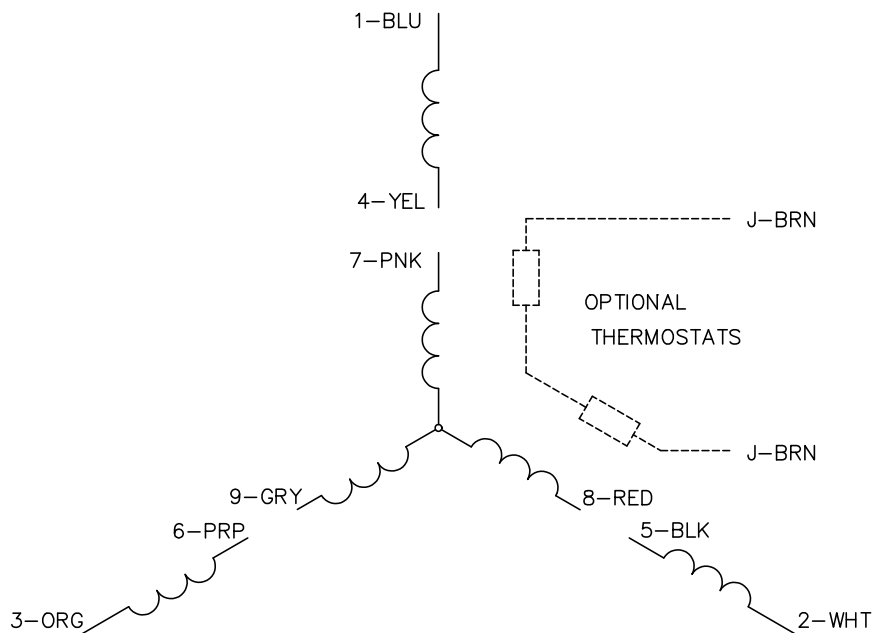
1 HP 3 PH 60 HZ 3500 RPM 460 V 3512M

TORQUES (LB-FT): PO=6.11 PU=2.3 LR=3.86 LRA=10.8

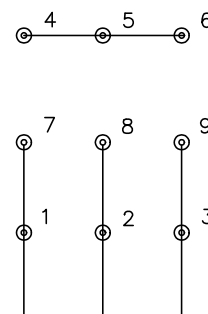




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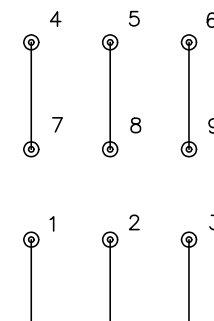


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E

BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005