ABB BALDOR RELIANCE

Customer information packet

CEM3545-G

1HP, 3450RPM, 3PH, 60HZ, 56C, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
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	CSA
	CSA EEV
	NEMA PREMIUM
	UR
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	3.000 A @ 208.0 V
	2.800 A @ 230.0 V
	1.400 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGY474
Layout	35LYE2181
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	12-17-2019

High Voltage Full Load Amps	1.4 a
Insulation Class	H
Inverter Code	Inverter Ready
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	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.23 IN
Power Factor	87
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	3450 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

NP3441LUA											
CAT.NO.	CEM3545-G										
SPEC	35-0000-0515										
HP	1										
VOLTS	230/460										
AMPS	2.8/1.4										
RPM	3450										
FRAME	56C	**HZ**	60	**PH**	3						
SF	1.15	**CODE**	K	**DES**	B	**CLASS**	H				
NEMA NOM. EFF	77	**PF**	87								
RATING	40C AMB-CONT										
CC	010A										
ENCL	TEFC	**SER**									
DE	6205	**ODE**	6203								
VPWM INVERTER READY	SFA 3.4/1.7										
CT6-60H(10:1)VT3-60H(20:1											
	50HZ 1HP 190/380V 3.4/1.7A										SF1.0

AC Induction Motor Performance Data
Record # 78173
Typical performance - not guaranteed values

Winding: 35WGY474-R036	**Type:** 3516M	**Enclosure:** TEFC

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		2.8/1.4	**Breakdown Torque**	5.6 LB-FT
R.P.M.		3450	**Pull-up Torque**	2.56 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	4.62 LB-FT
NEMA Design Code	B **KVA Code**	K	**Starting Current**	10.5 A
Service Factor (S.F.)		1.15	**No-load Current**	0.585 A
NEMA Nom. Eff.	77 **Power Factor**	87	**Line-line Res. @ 25ºC**	19.5 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	41°C
S.F. Amps			**Temp. Rise @ S.F. Load**	47°C
			Locked-rotor Power Factor	64.1
			Rotor inertia	0.0443 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	55	72	82	86	90	91	88
Efficiency	57.6	70.4	75.3	77	77	75.7	77
Speed	3564	3533	3500	3460	3418	3366	3435
Line amperes	0.68	0.851	1.08	1.37	1.65	2.01	1.54

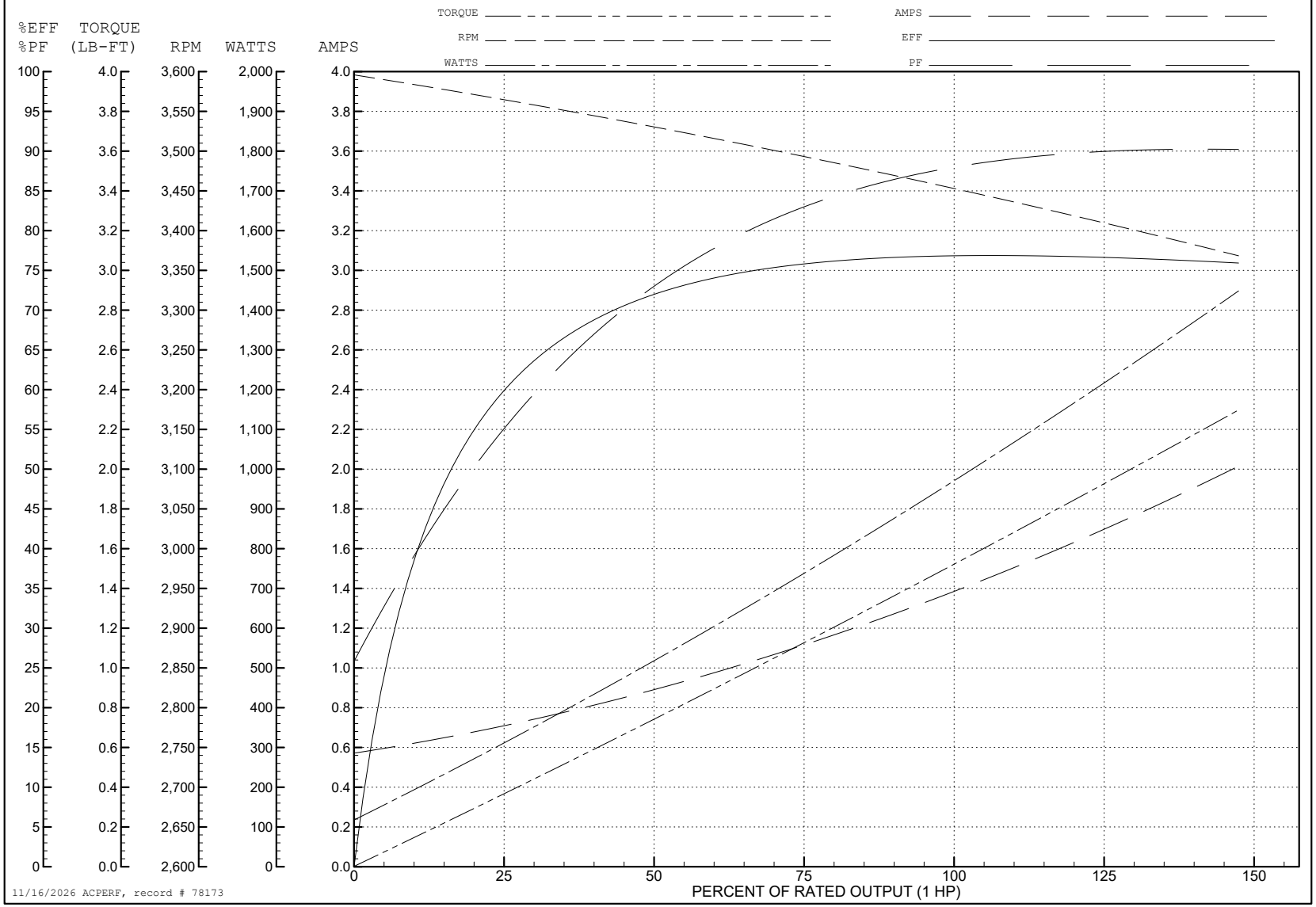
ABB Motors and Mechanical Inc.

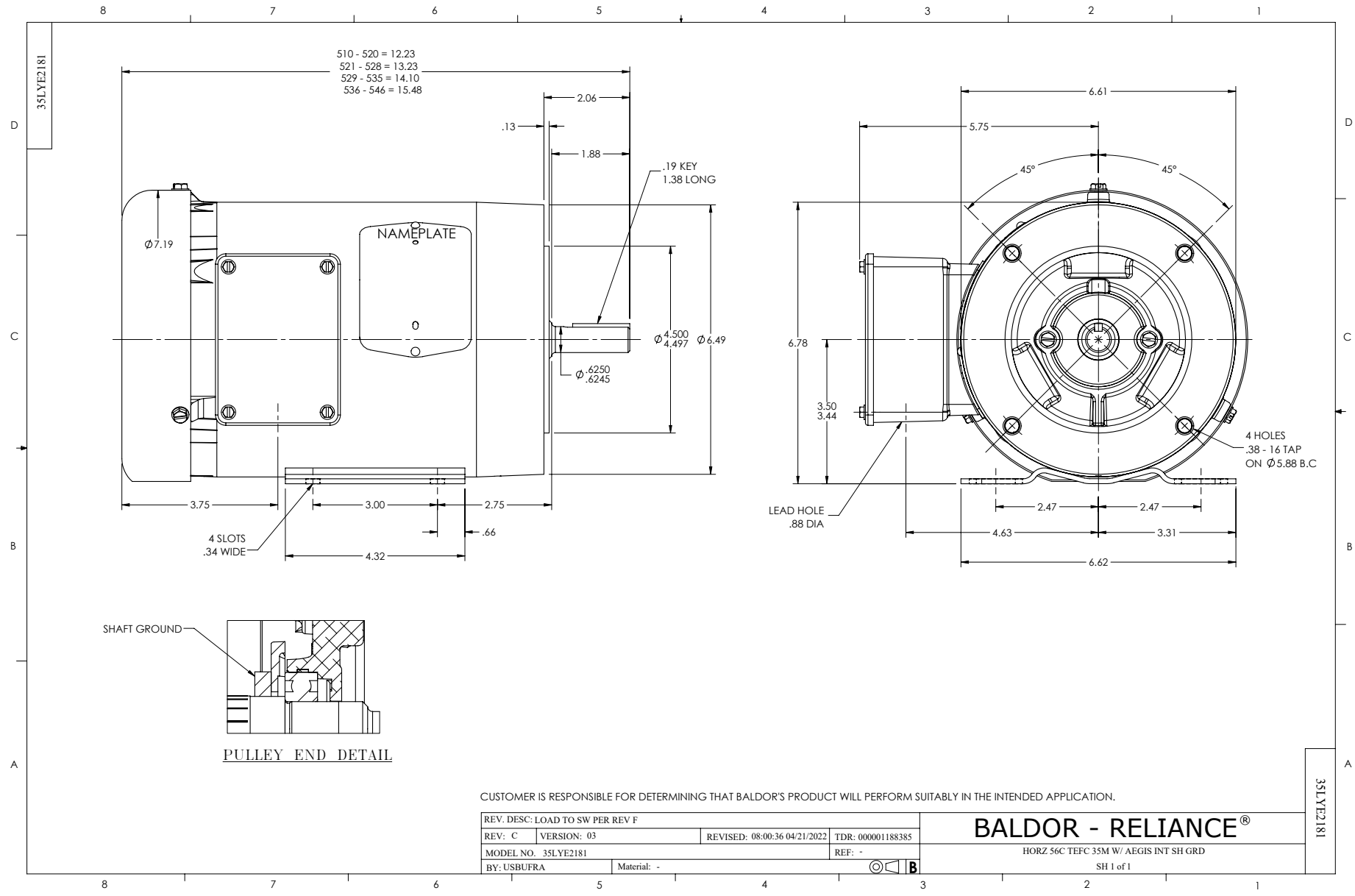
WINDING # 35WGY474

1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

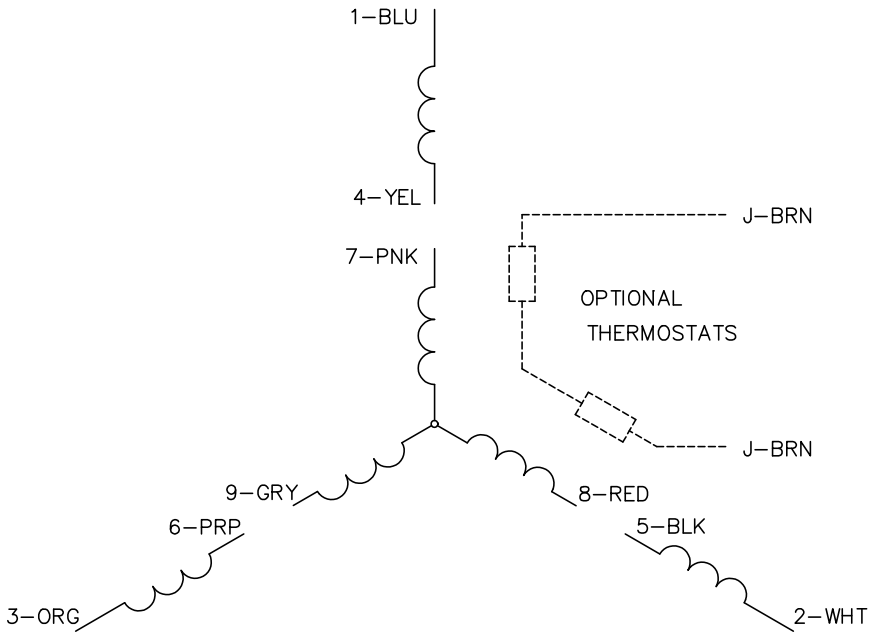
Typical performance - not guaranteed values.

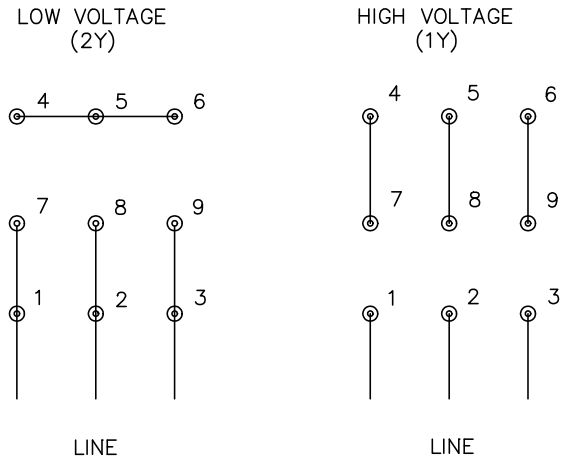
TORQUES(LB-FT): PO=5.6 PU=2.56 LR=4.62 LRA=10.5




35LYE2181
510 - 520 = 12.23
521 - 528 = 13.23
529 - 535 = 14.10
536 - 546 = 15.48
2.06
.13
1.88
.19 KEY
1.38 LONG
NAMEPLATE
Ø7.19
Ø 4.500
4.497
Ø6.49
Ø .6250
.6245
3.75
3.00
2.75
.66
4.32
4 SLOTS
.34 WIDE
6.61
5.75
45°
45°
6.78
3.50
3.44
4 HOLES
.38 - 16 TAP
ON Ø5.88 B.C
LEAD HOLE
.88 DIA
2.47
2.47
4.63
3.31
6.62
SHAFT GROUND
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: LOAD TO SW PER REV F
REV: C
VERSION: 03
REVISED: 08:00:36 04/21/2022
TDR: 000001188385
MODEL NO. 35LYE2181
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
HORZ 56C TEFC 35M W/ AEGIS INT SH GRD
SH 1 of 1
35LYE2181

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS