ABB BALDOR RELIANCE

Customer information packet

CEM3554-5

1.5HP, 1770RPM, 3PH, 60HZ, 56C, 3524M, 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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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	1.700 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE

Part Detail

Revision	E
Type	AC
Mech. spec.	35A012
Base	
Status	PRD/A
Elec. spec.	35WGG122
Layout	35LYA012
Eff. date	06-24-2025
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.23 IN
Power Factor	74
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP3441L									
CAT.NO.	CEM3554-5								
SPEC.	35A012G122G1								
HP	1.5								
VOLTS	575								
AMP	1.7								
RPM	1770								
FRAME	56C		**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	M	**DES**	B	**CL**	F		
NEMA-NOM-EFF	86.5	**PF**	74						
RATING	40C AMB-CONT								
CC	010A								
DE	6205		**ODE**	6203					
ENCL	TEFC	**SN**							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	SFA 1.9								

AC Induction Motor Performance Data
Record # 87553
Typical performance - not guaranteed values

Winding: 35WGG122-R001	**Type:** 3524M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	4.46 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			1.7	**Breakdown Torque**	17.4 LB-FT
R.P.M.			1770	**Pull-up Torque**	9.2 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	11.3 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	14.8 A
Service Factor (S.F.)			1.15	**No-load Current**	1 A
NEMA Nom. Eff.	86.5	**Power Factor**	77	**Line-line Res. @ 25ºC**	18.8 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	41°C
S.F. Amps			1.9	**Temp. Rise @ S.F. Load**	49°C
				Locked-rotor Power Factor	58.3
				Rotor inertia	0.173 lb-ft²

Load Characteristics 575 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	36	56	69	77	82	85	81
Efficiency	76.7	84.6	86.5	86.7	85.9	84.7	86.1
Speed	1792	1786	1779	1770	1762	1753	1762
Line amperes	1.06	1.2	1.42	1.7	2.01	2.36	1.85

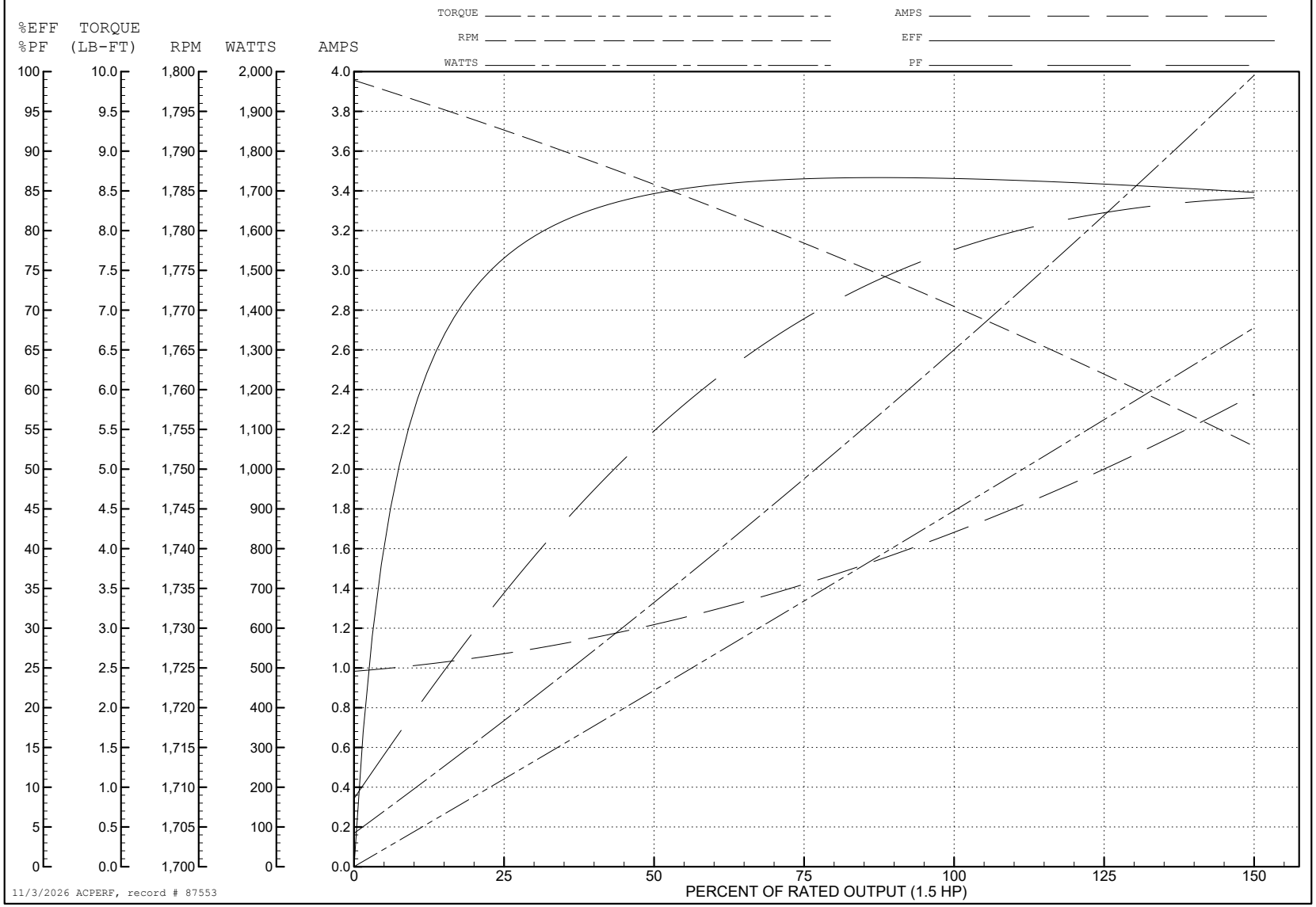
ABB Motors and Mechanical Inc.

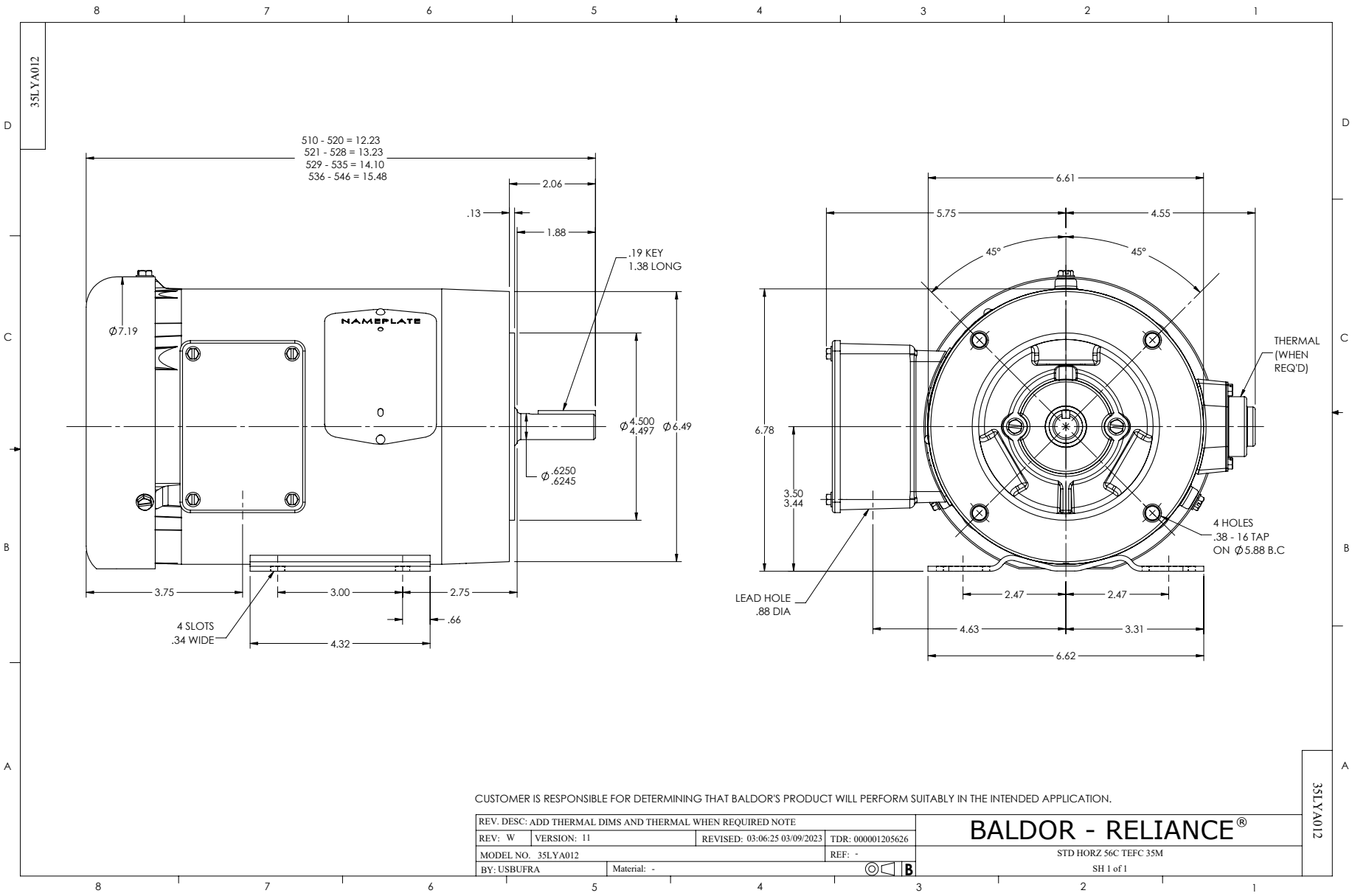
WINDING # 35WGG122

1.5 HP 3 PH 60 HZ 1770 RPM 575 V 3524M

Typical performance - not guaranteed values.

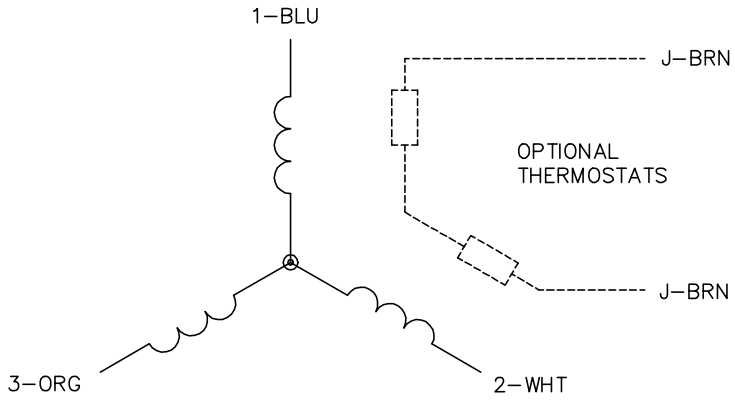
TORQUES(LB-FT): PO=17.4 PU=9.2 LR=11.3 LRA=14.8

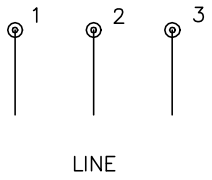



35LYA012
510 - 520 = 12.23
521 - 528 = 13.23
529 - 535 = 14.10
536 - 546 = 15.48
2.06
.13
1.88
.19 KEY
1.38 LONG
Ø7.19
NAMEPLATE
Ø 4.500
4.497
Ø6.49
Ø .6250
.6245
3.75
3.00
2.75
.66
4 SLOTS
.34 WIDE
4.32
6.61
5.75
4.55
45°
45°
THERMAL
(WHEN
REQ'D)
6.78
3.50
3.44
4 HOLES
.38 - 16 TAP
ON Ø5.88 B.C
LEAD HOLE
.88 DIA
2.47
2.47
4.63
3.31
6.62
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: ADD THERMAL DIMS AND THERMAL WHEN REQUIRED NOTE
REV: W
VERSION: 11
REVISED: 03:06:25 03/09/2023
TDR: 000001205626
MODEL NO. 35LYA012
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
STD HORZ 56C TEFC 35M
SH 1 of 1
35LYA012

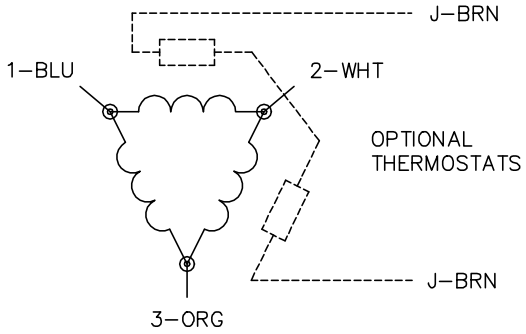
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1