ABB BALDOR RELIANCE

Customer information packet

CEM4106T

20HP, 3520RPM, 3PH, 60HZ, 256TC, 0936M, TEFC, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	256TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ
	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM (OLD LOGO)
	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	50.000 A @ 208.0 V
	46.000 A @ 230.0 V
	23.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AM
Type	AC
Mech. spec.	09C102
Base	
Status	PRD/A
Elec. spec.	09WGZ601
Layout	09LYC102
Eff. date	04-07-2026
CD Diagram	CD0005
Poles	02
Leads	9#10
Proprietary	False
Created date	06-09-2010

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0936M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.86 IN
Power Factor	89
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3520 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.	CEM4106T								
SPEC	09C102Z601G1								
HP	20								
VOLTS	208-230/460								
AMPS	50-46/23								
RPM	3520								
FRAME	256TC	**HZ**	60			**PH**	3		
SF	1.15	**CODE**	H	**DES**	A	**CLASS**	F		
NEMA NOM. EFF	91	**PF**	89						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	**SER**							
DE	6309	**ODE**	6208						
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	50Hz 20HP 190/380V 56/28A								SF1.0

AC Induction Motor Performance Data
Record # 57538
Typical performance - not guaranteed values

Winding: 09WGZ601-R004	**Type:** 0936M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	29.6 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			50-46/23	**Breakdown Torque**	111 LB-FT
R.P.M.			3520	**Pull-up Torque**	39.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	49.6 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	161 A
Service Factor (S.F.)			1.15	**No-load Current**	7.17 A
NEMA Nom. Eff.	91	**Power Factor**	89	**Line-line Res. @ 25ºC**	0.47592 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	76°C
S.F. Amps				**Temp. Rise @ S.F. Load**	95°C
				Locked-rotor Power Factor	29
				Rotor inertia	0.92 lb-ft²

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	58	78	86	89	90	90	90
Efficiency	88.9	92.2	92.4	91.7	90.7	89.2	91.1
Speed	3579.6	3561.5	3541.3	3519.5	3495.4	3467.8	3505
Line amperes	9	13	17.7	22.9	28.6	35	26.3

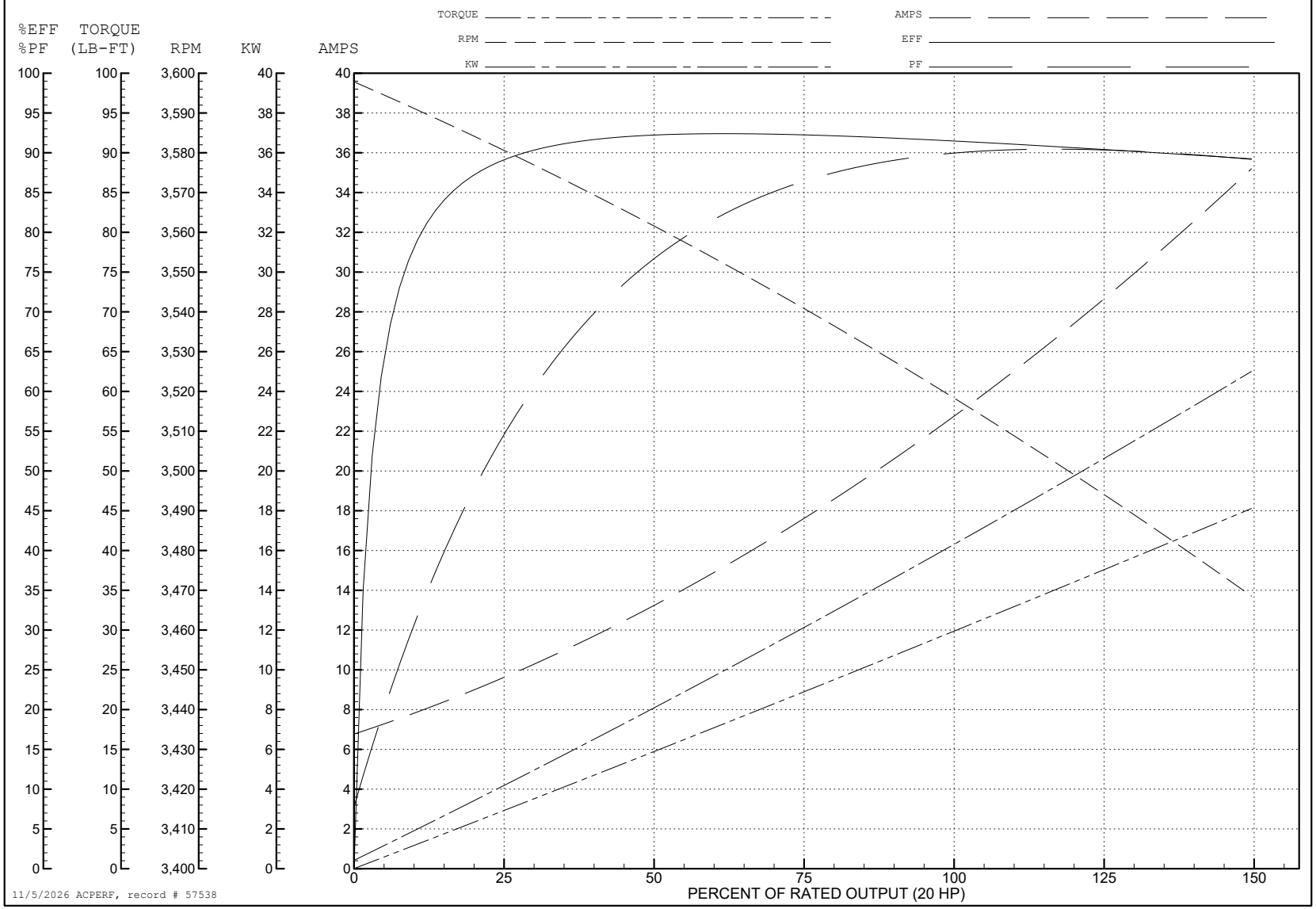
ABB Motors and Mechanical Inc.

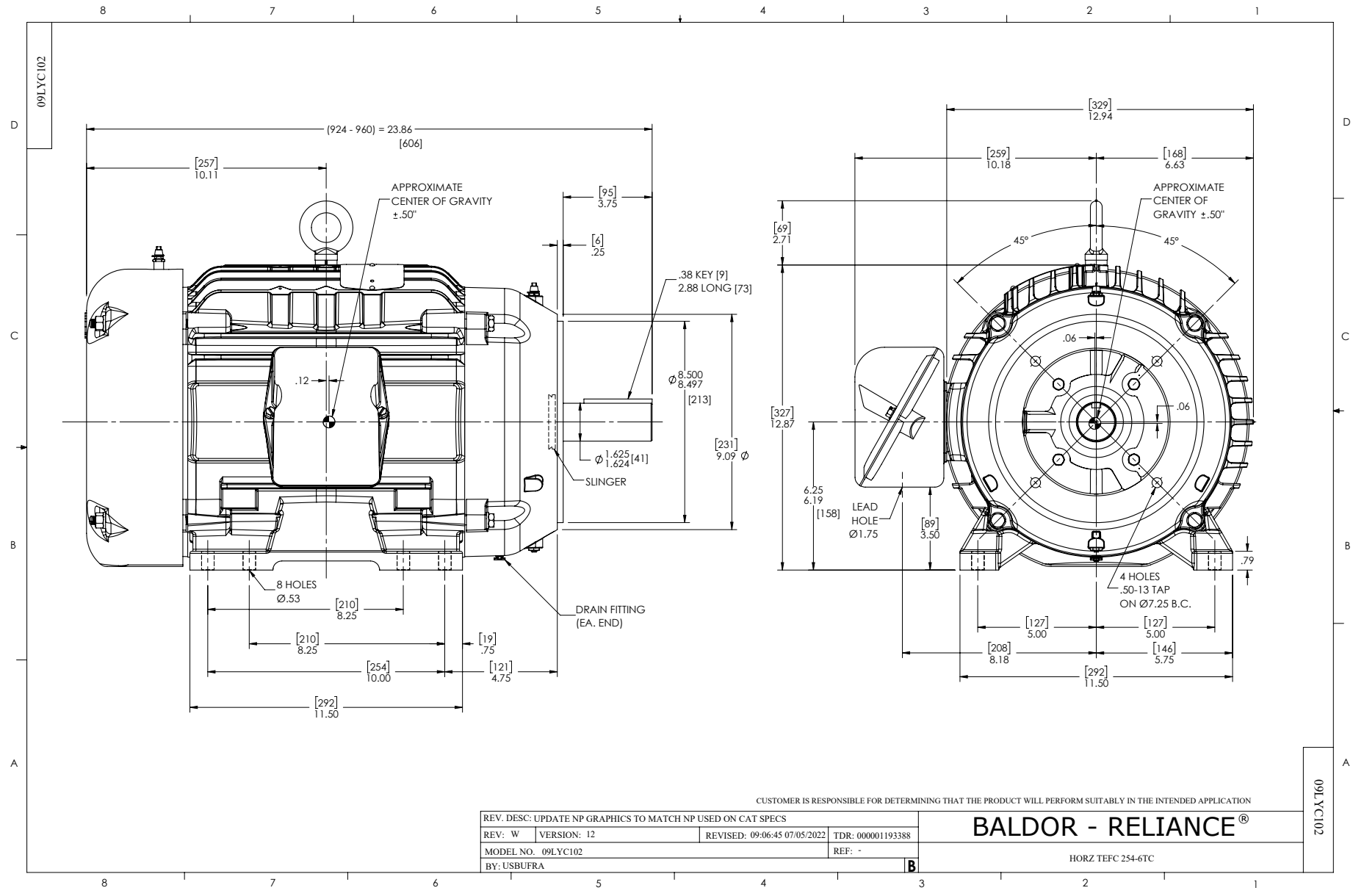
WINDING # 09WGZ601

20 HP 3 PH 60 HZ 3520 RPM 460 V 0936M

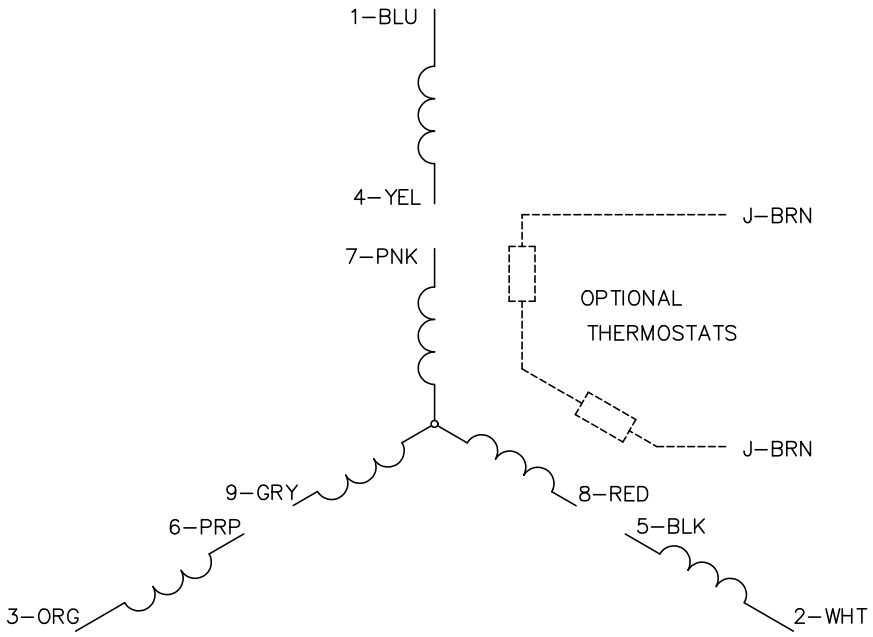
Typical performance - not guaranteed values.

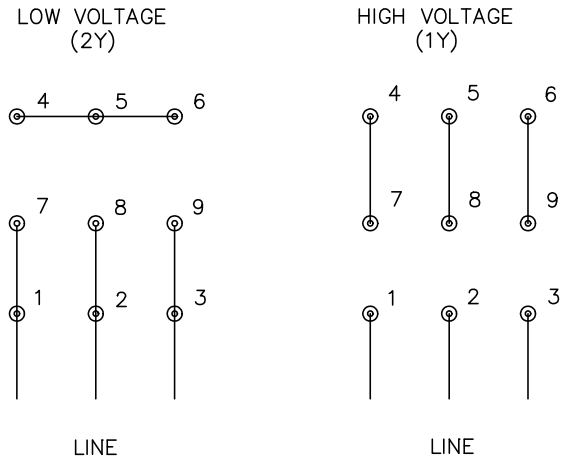
TORQUES(LB-FT): PO=111 PU=39.1 LR=49.6 LRA=161




09LYC102
(924 - 960) = 23.86
[606]
[257]
10.11
APPROXIMATE
CENTER OF GRAVITY
±.50"
[95]
3.75
[6]
.25
.38 KEY [9]
2.88 LONG [73]
.12
Ø 8.500
8.497
[213]
[231]
9.09 Ø
Ø 1.625
1.624 [41]
SLINGER
8 HOLES
Ø.53
[210]
8.25
[210]
8.25
[19]
.75
[254]
10.00
[121]
4.75
[292]
11.50
DRAIN FITTING
(EA. END)
[329]
12.94
[259]
10.18
[168]
6.63
APPROXIMATE
CENTER OF
GRAVITY ±.50"
[69]
2.71
45°
45°
.06
.06
[327]
12.87
6.25
6.19
[158]
LEAD
HOLE
Ø1.75
[89]
3.50
.79
4 HOLES
.50-13 TAP
ON Ø7.25 B.C.
[127]
5.00
[127]
5.00
[208]
8.18
[146]
5.75
[292]
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE NP GRAPHICS TO MATCH NP USED ON CAT SPECS
REV: W
VERSION: 12
REVISED: 09:06:45 07/05/2022
TDR: 000001193388
MODEL NO. 09LYC102
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HORZ TEFC 254-6TC
09LYC102

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