ABB BALDOR RELIANCE

Customer information packet

EM4106T-8

20HP, 3510RPM, 3PH, 60HZ, 256T, 0936M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	256T
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	200.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA PREMIUM (OLD LOGO) 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	51.000 A @ 208.0 V 52.000 A @ 200.0 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 Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	52.0 a
Insulation Class	F

Part Detail

Revision	G
Type	AC
Mech. spec.	09P11
Base	
Status	PRD/A
Elec. spec.	09WGT605
Layout	09LYP011
Eff. date	04-16-2024
CD Diagram	CD0695
Poles	02
Leads	6#8
Proprietary	False
Created date	07-07-2021

Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0936M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.36 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3510 rpm
Speed Code	Single Speed
Starting Method	Part Winding
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.	EM4106T-8								
SPEC.	09P011T605								
HP	20								
VOLTS	200								
AMP	52								
RPM	3510								
FRAME	256T	**HZ**	60				**PH**	3	
SER.F.	1.15	**CODE**	G	**DES**	A	**CL**	F		
NEMA-NOM-EFF	91	**PF**	89						
RATING	40C AMB-CONT								
CC	010A								
DE	6309	**ODE**	6208						
ENCL	TEFC	**SN**							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									

Accessories

Part number	Description	Multiplier
09-1309	C FACE KIT	A8

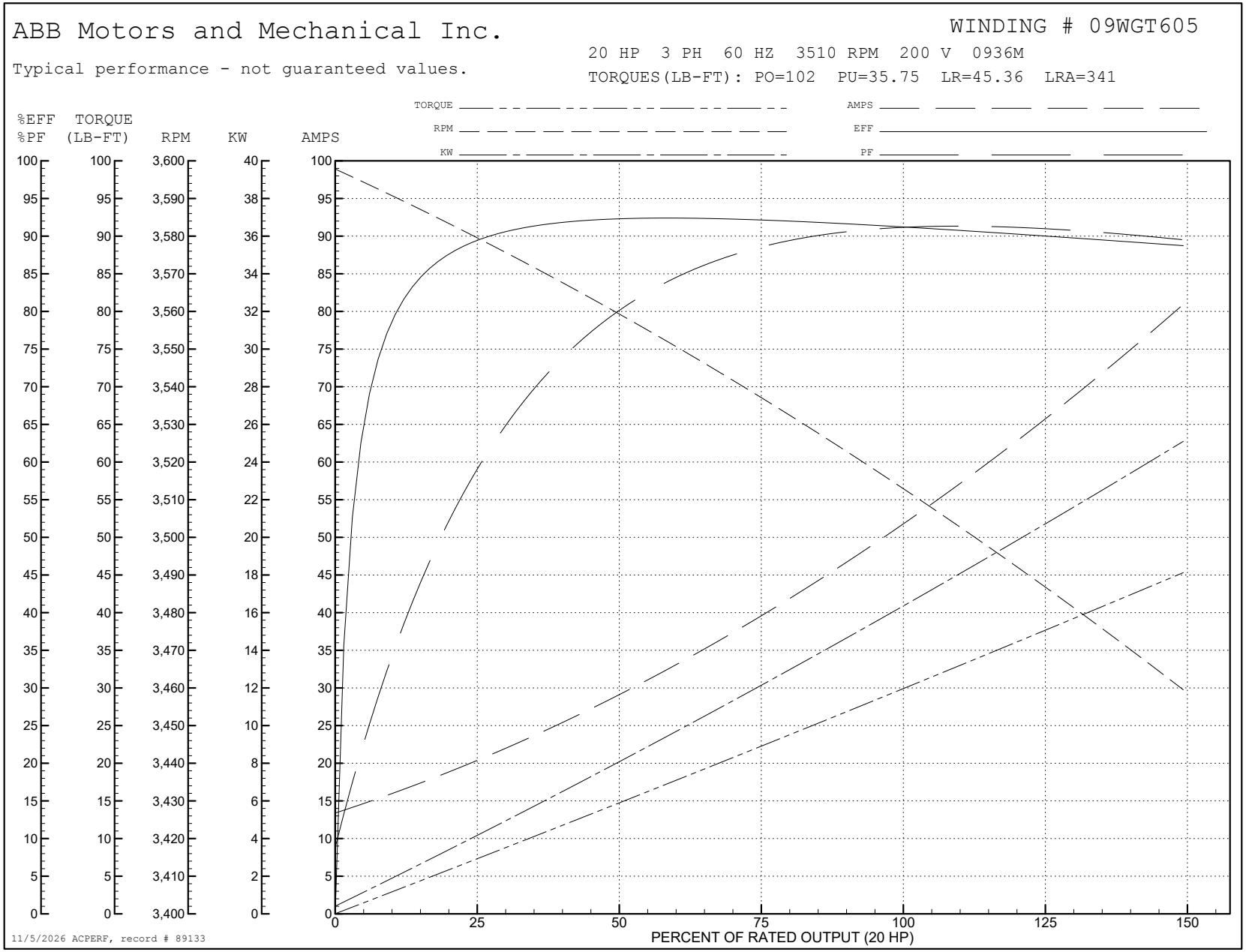
AC Induction Motor Performance Data
Record # 89133
Typical performance - not guaranteed values

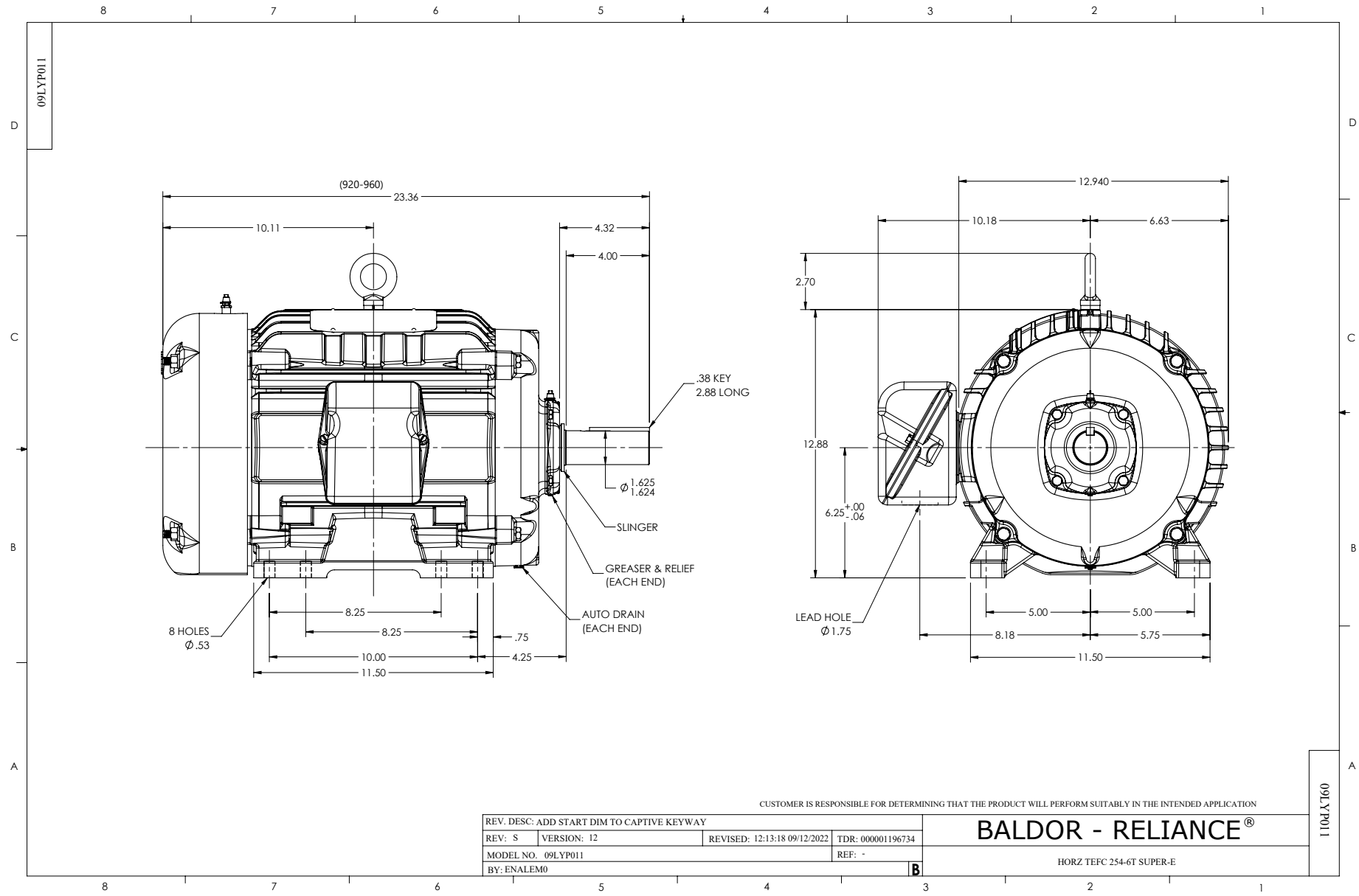
Winding: 09WGT605-R001	**Type:** 0936M	**Enclosure:** TEFC

Nameplate Data				**200 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			20	**Full Load Torque**	29.69 LB-FT
Volts			200	**Start Configuration**	direct on line
Full Load Amps			52	**Breakdown Torque**	102 LB-FT
R.P.M.			3510	**Pull-up Torque**	35.75 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	45.36 LB-FT
NEMA Design Code	A	**KVA Code**	G	**Starting Current**	341 A
Service Factor (S.F.)			1.15	**No-load Current**	14.29 A
NEMA Nom. Eff.	91	**Power Factor**	89	**Line-line Res. @ 25ºC**	0.093 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	78°C
S.F. Amps				**Temp. Rise @ S.F. Load**	99°C
				Locked-rotor Power Factor	29.0354
				Rotor inertia	0.92 lb-ft²

Load Characteristics 200 V, 60 Hz, 20 HP

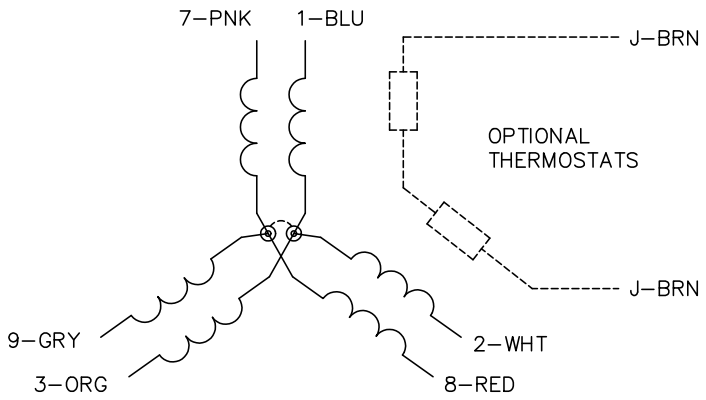
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	63	81	88	90	91	90	91
Efficiency	88.9	91.7	92.1	91.5	90.1	88.6	90.7
Speed	3578	3560	3538	3514	3488	3459	3498
Line amperes	18.88	28.53	39.71	52.06	65.44	80.53	60.1


ABB Motors and Mechanical Inc.
WINDING # 09WGT605
Typical performance - not guaranteed values.
20 HP 3 PH 60 HZ 3510 RPM 200 V 0936M
TORQUES(LB-FT): PO=102 PU=35.75 LR=45.36 LRA=341
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (20 HP)
11/5/2026 ACPERF, record # 89133

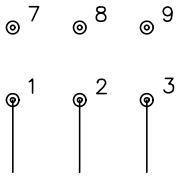

09LYP011
(920-960)
23.36
10.11
4.32
4.00
.38 KEY
2.88 LONG
Ø 1.625
1.624
SLINGER
GREASER & RELIEF
(EACH END)
AUTO DRAIN
(EACH END)
8 HOLES
Ø .53
8.25
8.25
.75
10.00
4.25
11.50
12.940
10.18
6.63
2.70
12.88
6.25 +.00 -.06
LEAD HOLE
Ø 1.75
5.00
5.00
8.18
5.75
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD START DIM TO CAPTIVE KEYWAY
REV: S
VERSION: 12
REVISED: 12:13:18 09/12/2022
TDR: 000001196734
MODEL NO. 09LYP011
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ TEFC 254-6T SUPER-E
09LYP011

CD0695

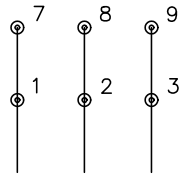
TYPICAL WYE–CONNECTED MOTOR



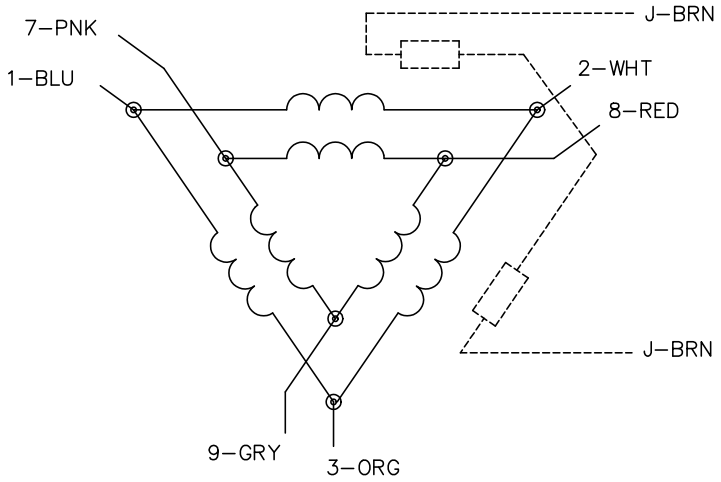
START CONNECTION



RUN CONNECTION



TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. MOTOR MAY BE 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 ALWAYS BE NUMBERED AS SHOWN.

CD0695

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
CD0695		FILE: AAA00005151	MDL: –
		MTL: –	3PH, SV, 6 LEADS, PART WINDING START