

ABB BALDOR RELIANCE III

Customer information packet

EM4106T-8

20HP, 3510RPM, 3PH, 60HZ, 256T, 0936M, TEFC, F1

Class - None

Division - Not Applicable

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. @ 25°C		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

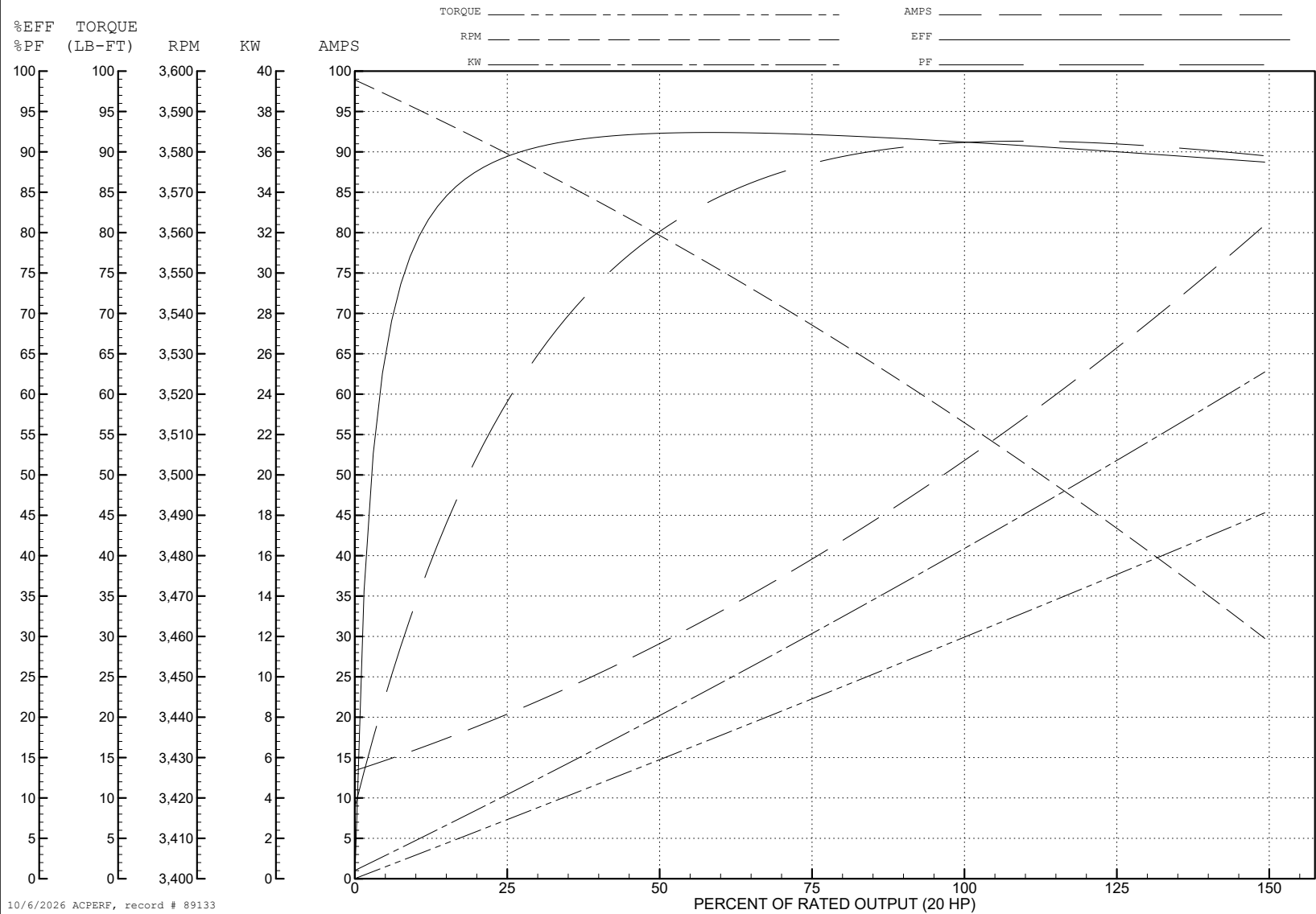
ABB Motors and Mechanical Inc.

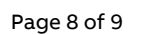
WINDING # 09WGT605

Typical performance - not guaranteed values.

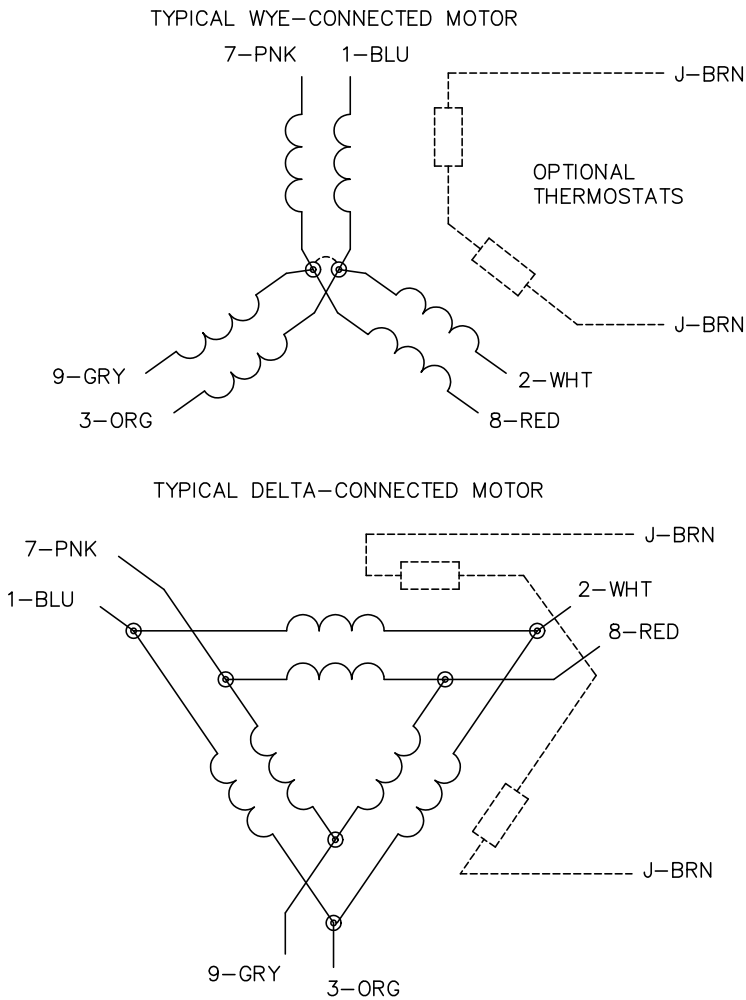
20 HP 3 PH 60 HZ 3510 RPM 200 V 0936M

TORQUES (LB-FT): PO=102 PU=35.75 LR=45.36 LRA=341

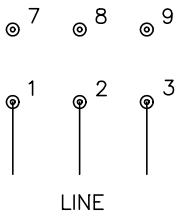




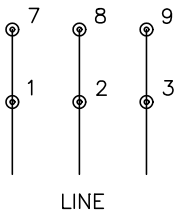
CD0695



START CONNECTION



RUN CONNECTION



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: C

BY: JLP

REVISED: 01/21/99 3:19

TDR: 0171435

S69000

FILE: AAA00005151

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START

CD0695