

ABB BALDOR RELIANCE III

Customer information packet

EM2514T-8

20HP, 3510RPM, 3PH, 60HZ, 254T, 3928M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	254T
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	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 CURUSEEV NEMA PREMIUM (OLD LOGO)
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	53.000 A @ 200.0 V
Design Code	B
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
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	53.0 a
Insulation Class	F

Part Detail

Revision	X
Type	AC
Mech. spec.	39K57
Base	
Status	PRD/A
Elec. spec.	39WGX814
Layout	39LYK057
Eff. date	12-12-2025
CD Diagram	CD0695
Poles	02
Leads	6#8
Proprietary	False
Created date	05-14-2012

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3928M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	21.69 IN
Power Factor	88
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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

NP3553L									
CAT.NO.	EM2514T-8								
SPEC	39K057X814								
HP	20								
VOLTS	200								
AMPS	53								
RPM	3510								
FRAME	254T		HZ	60			PH	3	
SF	1.15	CODE	G	DES	B	CLASS	F		
NEMA NOM. EFF	91	PF	88						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SER							
DE	6309		ODE	6208					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									

Accessories

Part number	Description	Multiplier
39-3400	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 38396

Typical performance - not guaranteed values

Winding: 39WGX814-R001			Type: 3928M		Enclosure: OPSB			
Nameplate Data			200 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		20	Full Load Torque		29.6 LB-FT			
Volts		200	Start Configuration		direct on line			
Full Load Amps		53	Breakdown Torque		105 LB-FT			
R.P.M.		3510	Pull-up Torque		34.1 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		47.8 LB-FT		
NEMA Design Code		B	KVA Code	G	Starting Current		333 A	
Service Factor (S.F.)		1.15	No-load Current		18.2 A			
NEMA Nom. Eff.		91	Power Factor		88	Line-line Res. @ 25°C		0.102 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		44°C	
S.F. Amps			Temp. Rise @ S.F. Load		54°C			
			Locked-rotor Power Factor		30			
			Rotor inertia		0.715 lb-ft²			

Load Characteristics 200 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	77	86	88	89	88	89
Efficiency	85.5	90.7	91.5	91	90	88.8	90.4
Speed	3580	3561	3541	3518	3491	3465	3502
Line amperes	22.2	31	40.8	53.1	66.5	80.4	61.1

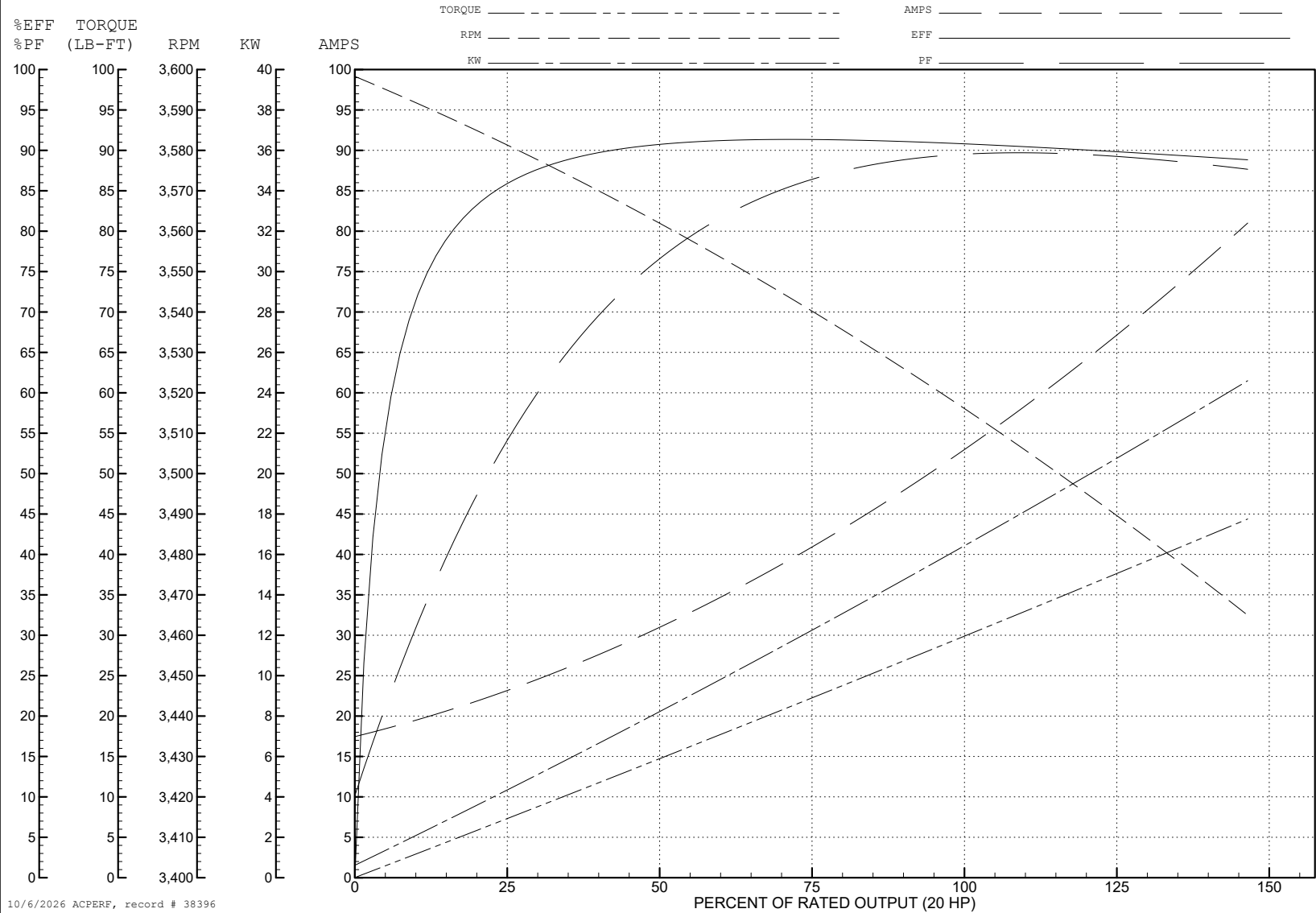
ABB Motors and Mechanical Inc.

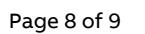
WINDING # 39WGX814

Typical performance - not guaranteed values.

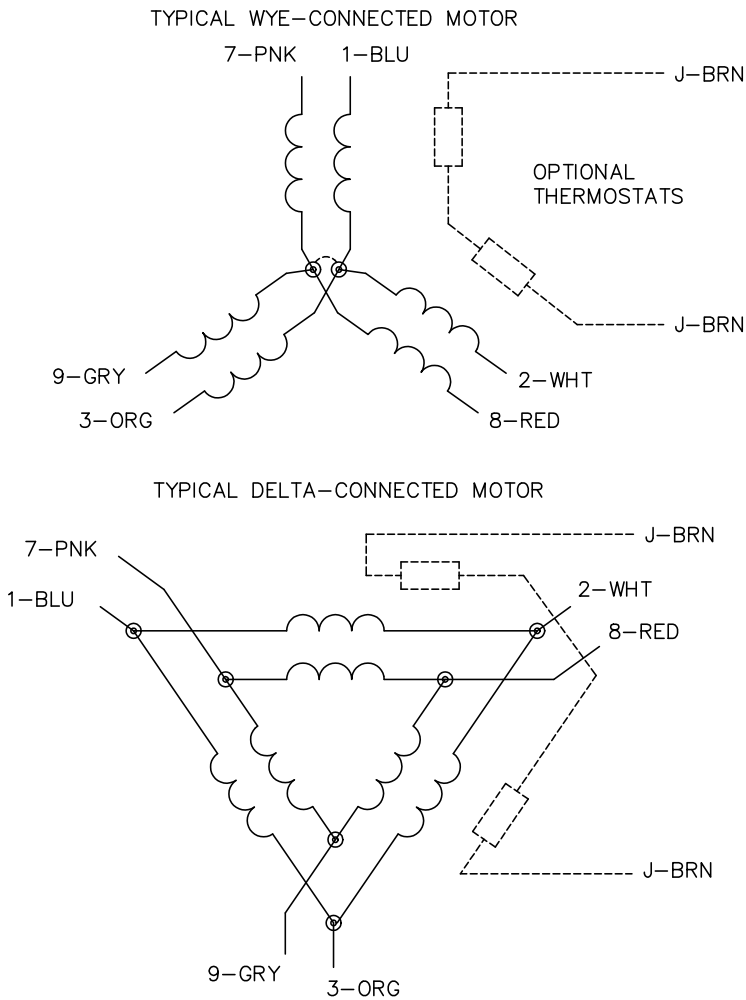
20 HP 3 PH 60 HZ 3510 RPM 200 V 3928M

TORQUES (LB-FT): PO=105 PU=34.1 LR=47.8 LRA=333

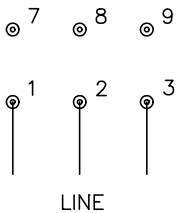




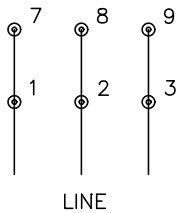
CD0695



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