

ABB BALDOR RELIANCE III

Customer information packet

EM2511T

10HP, 1180RPM, 3PH, 60HZ, 256T, 3954M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	256T
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	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM 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	28.600 A @ 230.0 V 30.000 A @ 208.0 V 14.300 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AR
Type	AC
Mech. spec.	39K57
Base	
Status	PRD/A
Elec. spec.	39WGW950
Layout	39LYK057
Eff. date	12-12-2025
CD Diagram	CD0180
Poles	06
Leads	9#12
Proprietary	False
Created date	01-01-0001

Heater Indicator	No Heater
High Voltage Full Load Amps	14.3 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No 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	3954M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	23.19 IN
Power Factor	71
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	1180 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

NP3554LUA										
CAT.NO.	EM2511T			P/N			ENCL			OPSE
SPEC.	39K057W950	CC	010A	FRAME		256T	SER.NO.			
HP	10		CLASS		F	HZ	60			
RPM	1180		PH	3	DES		A			
VOLTS	230/460			CODE		J	ODE BRG	6208	DE BRG	6309
AMPS	28.6/14.3									
RATING	40C AMB-CONT		NEMA-NOM-EFF			91.7	GREASE	POLYREX EM		
PF	71	SER.F.	1.15		CT30-60(2:1) VT3-60(20:1)					
USABLE AT	50HZ 10HP 190/380V 33.4/16.7A			SF 1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.								

Accessories

Part number	Description	Multiplier
39-3400	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 13008

Typical performance - not guaranteed values

Winding: 39WGW950-R001			Type: 3954M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		10	Full Load Torque		44.4 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		28.6/14.3	Breakdown Torque		132 LB-FT		
R.P.M.		1180	Pull-up Torque		53 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		69.8 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		91.8 A
Service Factor (S.F.)		1.15		No-load Current		7.16 A	
NEMA Nom. Eff.		91.7	Power Factor	71	Line-line Res. @ 25°C		0.746 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		22°C	
S.F. Amps				Temp. Rise @ S.F. Load		29°C	
				Locked-rotor Power Factor		25.9	
				Rotor inertia		4.34 lb-ft²	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	54	65	71	74	75	73
Efficiency	85.7	91	92	92	91.4	90.5	91.6
Speed	1196	1192	1187	1182	1177	1172	1179
Line amperes	8.04	9.52	11.7	14.25	17.29	20.7	16.07

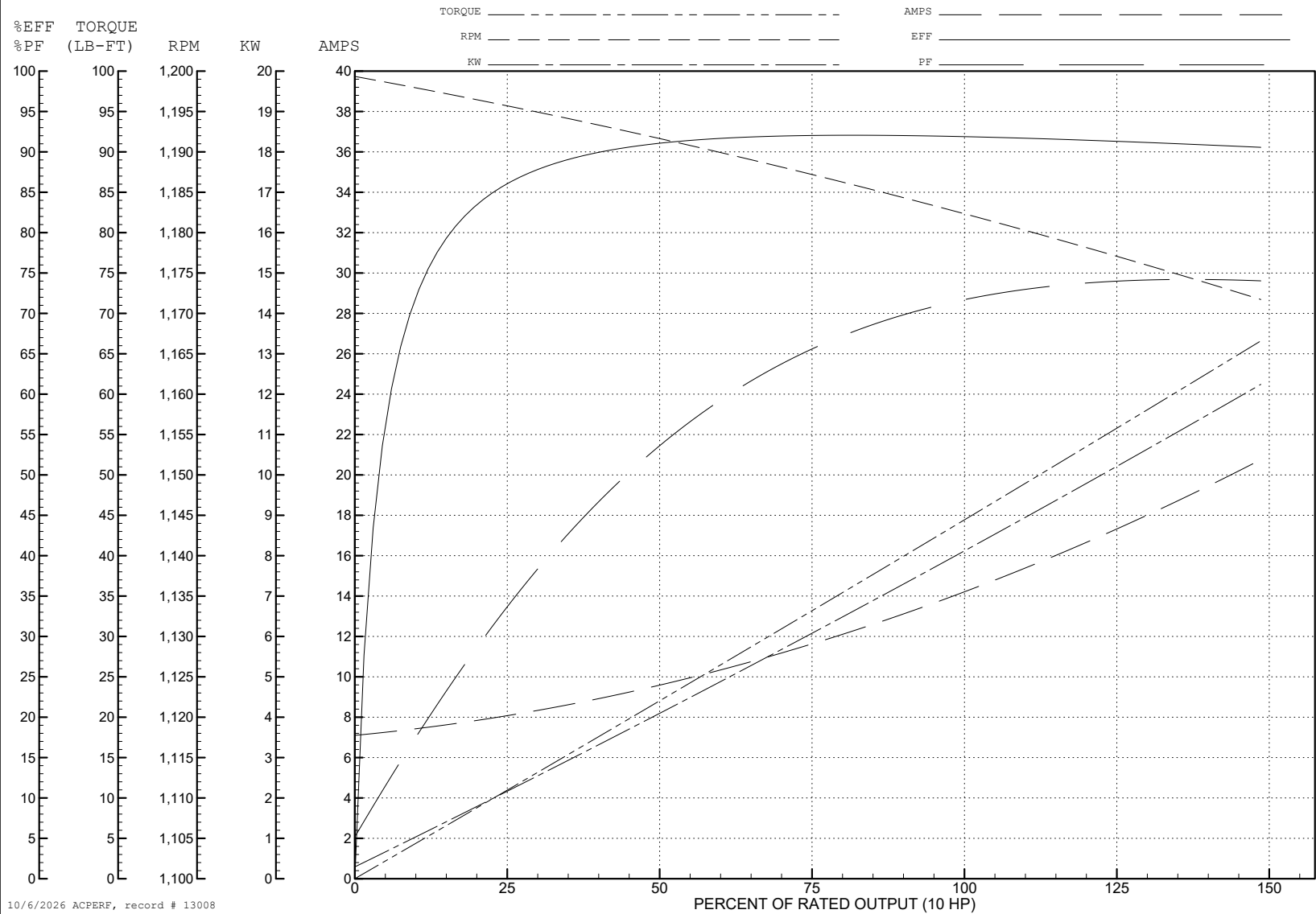
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WINDING # 39WGW950

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1180 RPM 460 V 3954M

TORQUES (LB-FT): PO=132 PU=53 LR=69.8 LRA=91.8



AC Induction Motor Performance Data

Record # 33857

Typical performance - not guaranteed values

Winding: 39WGW950-R001		Type: 3954M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	10	Full Load Torque	44.1 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	28.6/14.3	Breakdown Torque	149 LB-FT
R.P.M.	1180	Pull-up Torque	55.5 LB-FT
Hz	60 Phase	Locked-rotor Torque	67.6 LB-FT
NEMA Design Code	A KVA Code	Starting Current	91.6 A
Service Factor (S.F.)	1.15	No-load Current	7.51 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	0.72568 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	18°C
S.F. Amps		Temp. Rise @ S.F. Load	22°C
		Locked-rotor Power Factor	25.9
		Rotor inertia	4.34 LB-FT ²

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	53	64	70	73	74	72
Efficiency	84.5	90.2	91.8	92.1	91.8	91.1	91.9
Speed	1195.9	1191.9	1187.8	1182.8	1177.7	1171.6	1180
Line amperes	8.2	9.72	11.9	14.4	17.5	20.6	16.3

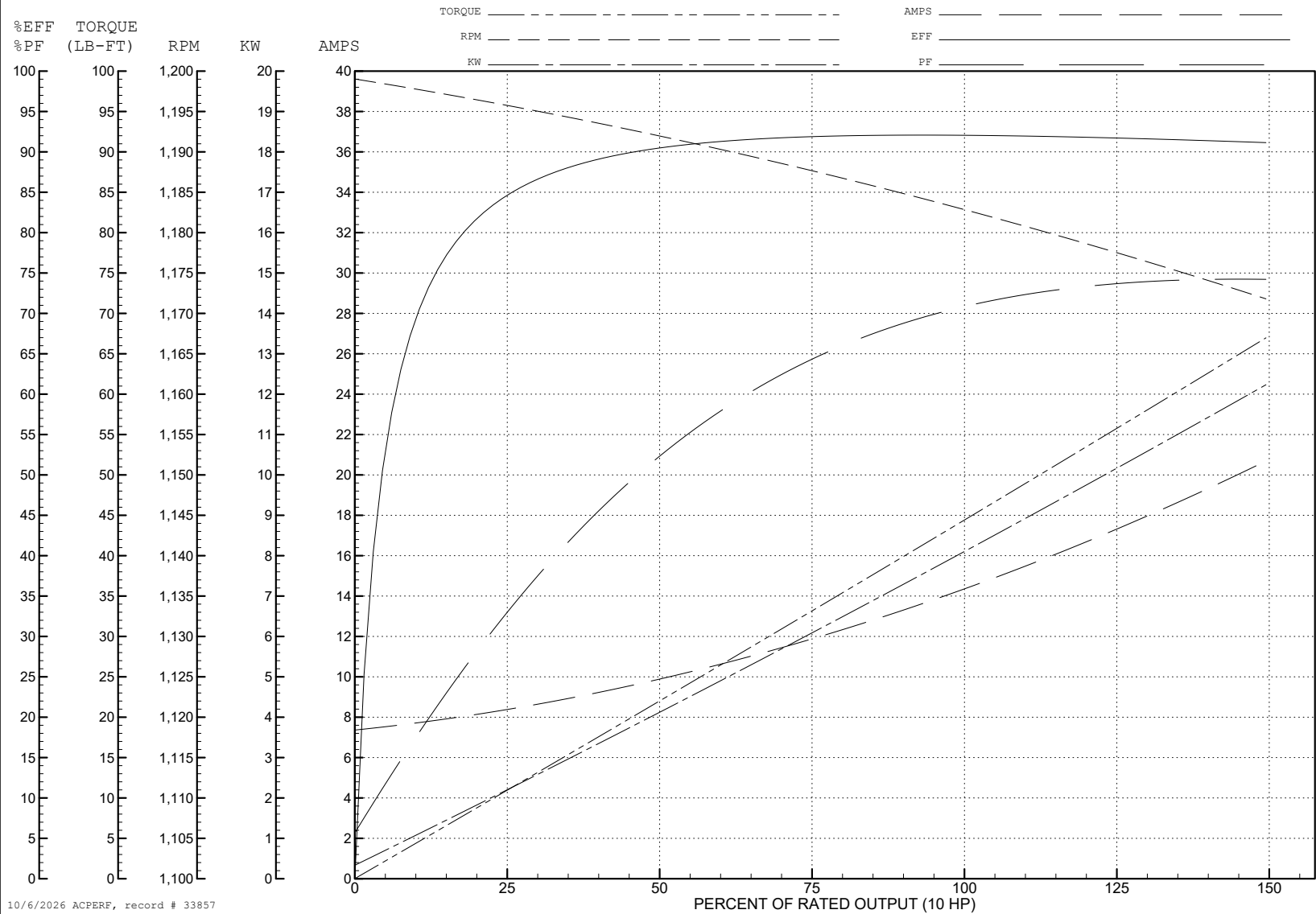
ABB Motors and Mechanical Inc.

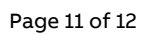
WINDING # 39GW950

Typical performance - not guaranteed values.

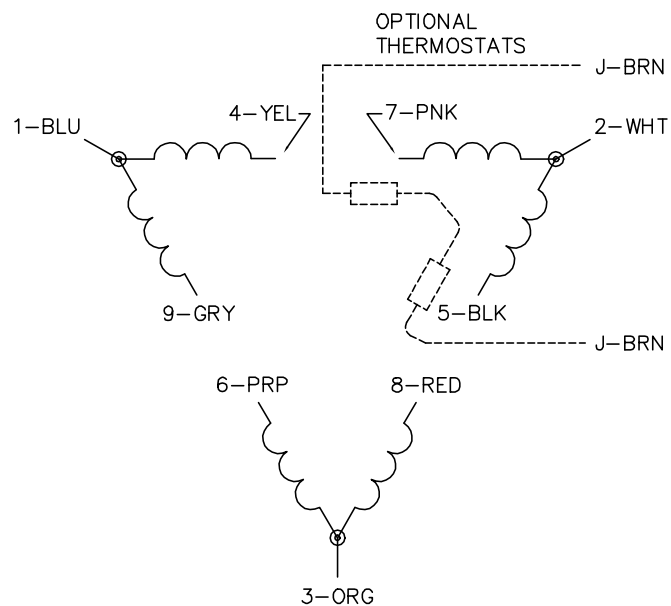
10 HP 3 PH 60 HZ 1180 RPM 460 V 3954M

TORQUES (LB-FT): PO=149 PU=55.5 LR=67.6 LRA=91.6

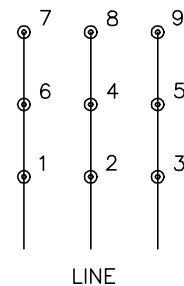




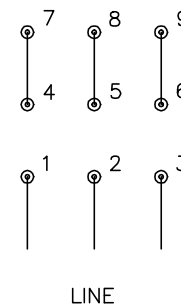
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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.

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

CD0180