

ABB BALDOR RELIANCE III

Customer information packet

SPM3910T

15HP, 1770RPM, 3PH, 60HZ, 254T, 3958M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM 4 WEEE
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	18.300 A @ 460.0 V 36.600 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	18.3 a

Part Detail

Revision	C
Type	AC
Mech. spec.	39E762
Base	
Status	PRD/A
Elec. spec.	39WGY450
Layout	39LYE762
Eff. date	12-18-2025
CD Diagram	CD0180
Poles	04
Leads	9#12 Y
Proprietary	False
Created date	10-24-2023

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3958M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.56 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP4423A01A05L													
CAT #	SPM3910T					WGT	290		LBS				
SPEC	39E762Y450					ENCL	TEFC						
SER #						CC	010A		IP	54			
HP	15		MAG CUR			15.2/7.6							
VOLTS	230/460					NEMA NOM. EFF					93.6		
AMPS	36.6/18.3					PF	82						
RATING	40C AMB-CONT												
RPM	1770					MAX RPM		2700					
FRAME	254T	HZ	60		CODE	J	CLASS		F				
SER.F.	1.25	SF AMP	45.4/22.7				PH	3	DES	A			
DE	6309		ODE		6208								
LUBRICATION	POLYREX EM												
ID LOGO	INVERTER TYPE			VPWM		CHP	60		TO	90		1.5:1	
ID LOGO	WK2	2.54	CT	6	TO	60	10:1						
ID LOGO	SL HZ	1	VT	3	TO	60	20:1						
							QR						
YR													

AC Induction Motor Performance Data

Record # 114778

Typical performance - not guaranteed values

Winding: 39WGY450-R003			Type: 3958M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		15		Full Load Torque		44.37 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		36.6/18.3		Breakdown Torque		216 LB-FT
R.P.M.		1770		Pull-up Torque		102 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		128 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		174 A
Service Factor (S.F.)		1.25		No-load Current		9.46 A
NEMA Nom. Eff.		93.6	Power Factor	Line-line Res. @ 25°C		0.41963 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		23°C
S.F. Amps		45.4/22.7		Temp. Rise @ S.F. Load		30°C
				Locked-rotor Power Factor		31.4
				Rotor inertia		2.54 lb-ft²

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	73	79	83	85	83
Efficiency	88.4	92.8	93.9	94.1	93.9	93.5	93.9
Speed	1795.9	1790.9	1786.2	1781.1	1776.1	1770.5	1776
Line amperes	10.4	12.6	15.4	18.8	22.5	26.4	22.5

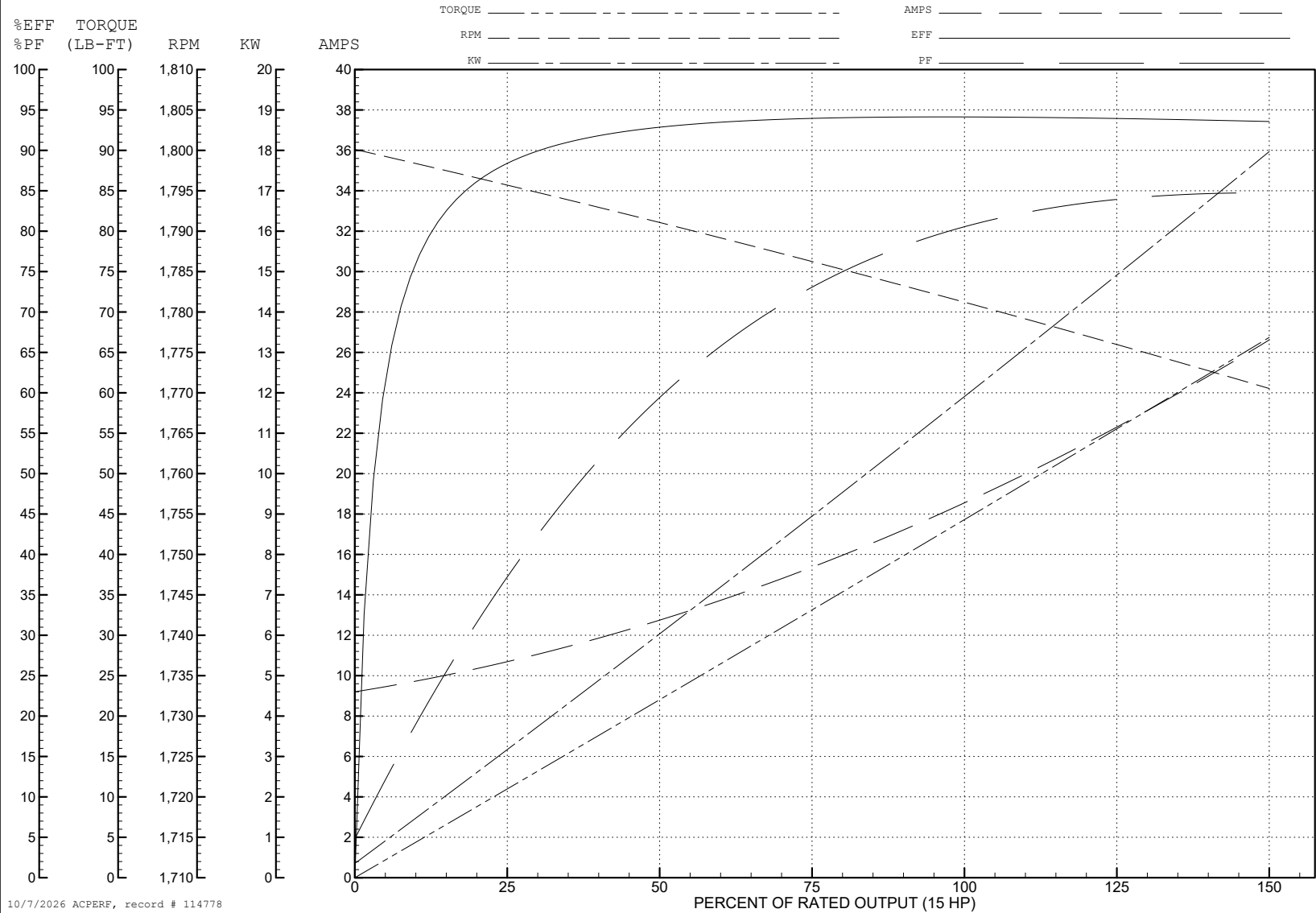
ABB Motors and Mechanical Inc.

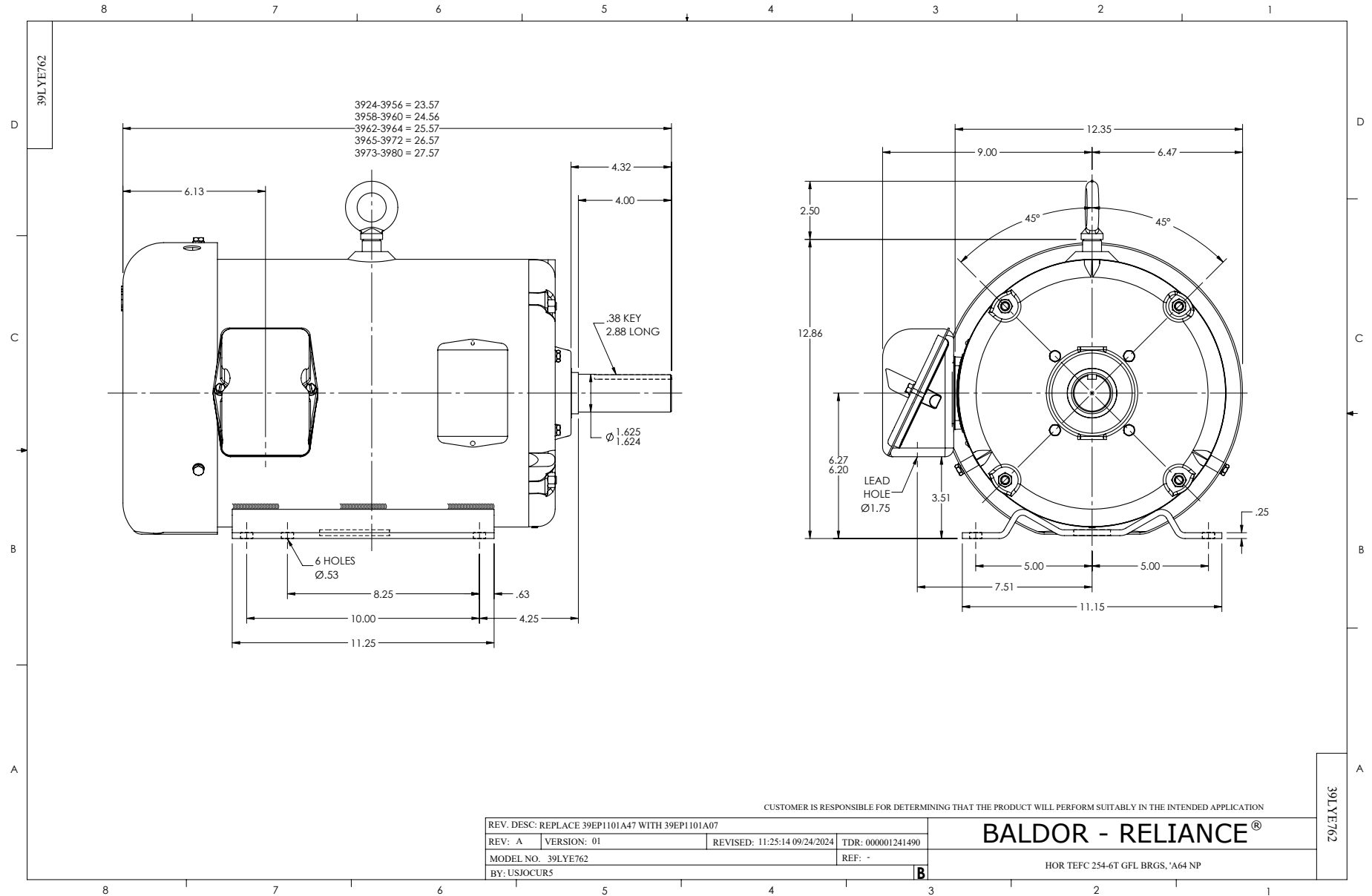
WINDING # 39WGY450

Typical performance - not guaranteed values.

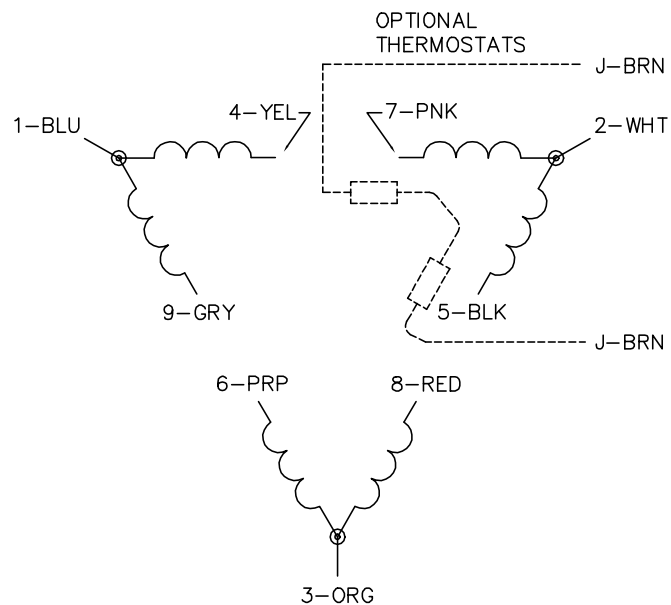
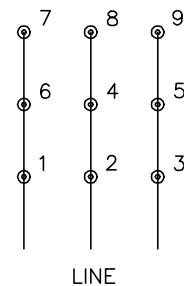
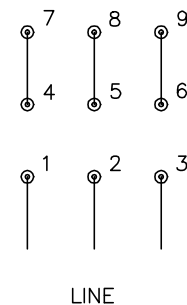
15 HP 3 PH 60 HZ 1770 RPM 460 V 3958M

TORQUES (LB-FT): PO=216 PU=102 LR=128 LRA=174





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

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