

ABB BALDOR RELIANCE III

Customer information packet

EM2549T

75HP, 3540RPM, 3PH, 60HZ, 364TS, 4254M, OPSB, F

Specifications

Enclosure	OPSB
Frame	364TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 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	178.000 A @ 208.0 V 82.000 A @ 460.0 V 164.000 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 Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	82.0 a

Part Detail

Revision	R
Type	AC
Mech. spec.	42E212
Base	
Status	PRD/A
Elec. spec.	42WGW903
Layout	42LYE212
Eff. date	11-29-2023
CD Diagram	CD0180
Poles	02
Leads	9#6
Proprietary	False
Created date	01-21-2011

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4254M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	25.81 IN
Power Factor	91
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3540 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

NP2138LUA												
CAT.NO.	EM2549T			P/N					ENCLOSURE			OPSB
SPEC.	42E212W903		CC	010A	FRAME		364TS		S/N			
HP	75			CLASS		F	HZ		60			
RPM	3540			PH	3	DES		A				
VOLT	230/460			KVA-CODE			G		ODE BRG	6311	DE BRG	6313
AMP	164/82											
RATING	40C AMB-CONT			GREASE			POLYREX EM					
NEMA-NOM-EFF	93.6	PF	91	SER.F.	1.15							
	50Hz 75Hp 190/380V 198/99A						SF 1.0					
HTR-VOLTS	HTR-AMPS											

Accessories

Part number	Description	Multiplier
42-1400	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 33387

Typical performance - not guaranteed values

Winding: 42WGW903-R001			Type: 4254M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		75	Full Load Torque		111 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		164/82	Breakdown Torque		382 LB-FT		
R.P.M.		3540	Pull-up Torque		135 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		172 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		556 A
Service Factor (S.F.)		1.15	No-load Current		18.5 A		
NEMA Nom. Eff.		93.6	Power Factor	91	Line-line Res. @ 25°C		0.0817 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		42°C
S.F. Amps					Temp. Rise @ S.F. Load		52°C
					Locked-rotor Power Factor		22
					Rotor inertia		4.22 LB-FT2

Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	72	86	90	91	90	89	90
Efficiency	93	95.1	95	94.3	93.7	92.6	94
Speed	3588	3574	3558	3540	3521	3500	3529
Line amperes	26.4	43	61.6	81.5	103	126	94.4

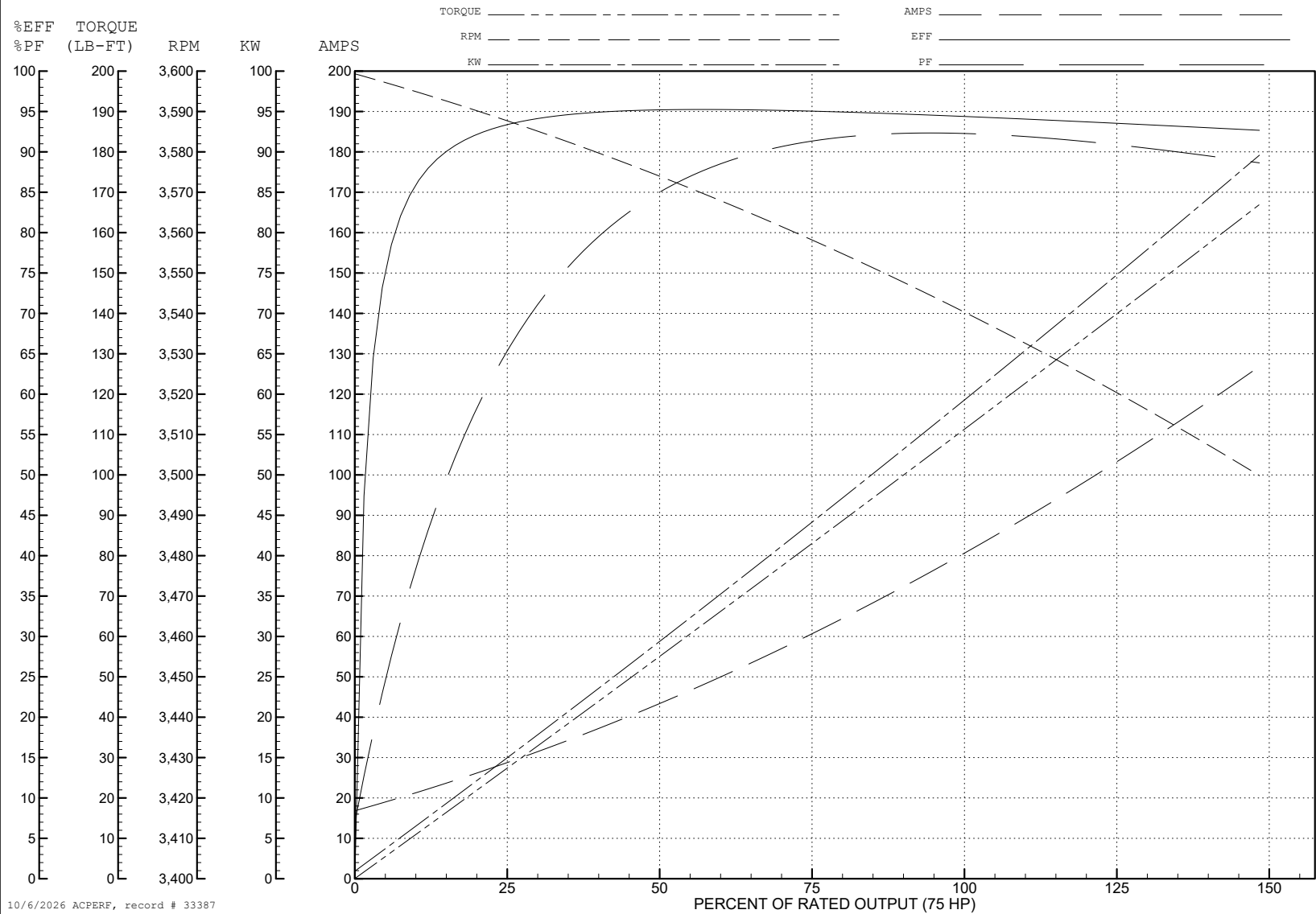
ABB Motors and Mechanical Inc.

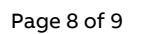
WINDING # 42WGW903

Typical performance - not guaranteed values.

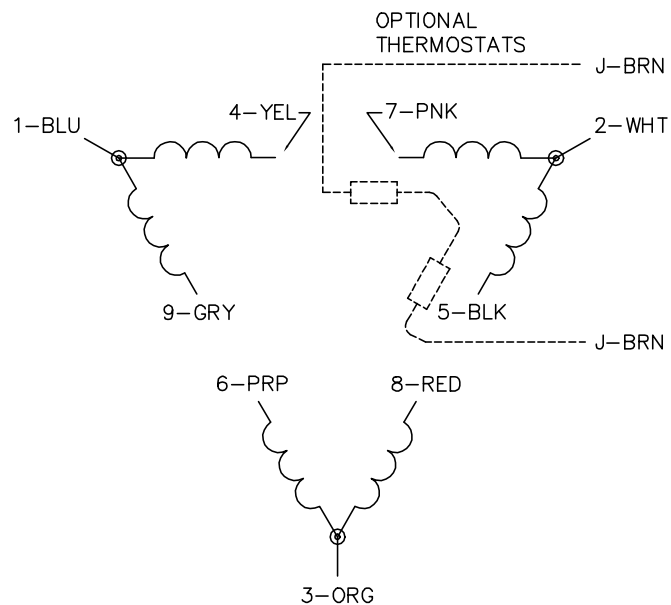
75 HP 3 PH 60 HZ 3540 RPM 460 V 4254M

TORQUES (LB-FT): PO=382 PU=135 LR=172 LRA=556

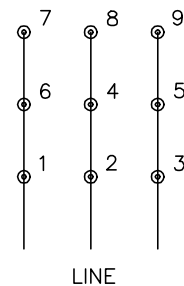




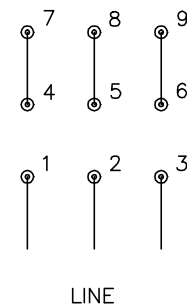
CD0180



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.

CD0180

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

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