

ABB BALDOR RELIANCE III

Customer information packet CEM2549T

75HP, 3540RPM, 3PH, 60HZ, 364TSC, OPSB, F1

Specifications

Enclosure	OPSB
Frame	364TSC
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
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	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
Heater Indicator	No Heater
High Voltage Full Load Amps	82.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	42WGW903
Layout	42LY-000-021
Eff. date	02-12-2024
CD Diagram	CD0180
Poles	02
Leads	9#6
Proprietary	False
Created date	03-06-2020

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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 Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
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
NP2138L

CAT.NO.	CEM2549T		P/N			ENCLOSURE	OPSB						
SPEC.	42-0000843	CC	010A	FRAME	364TSC	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								
HTR-VOLTS		HTR-AMPS											

Parts List

Part number	Description	Quantity
SA379772	SA 42-0000843	1.000 ea
RA369795	RA 42-0000843	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP2138L	ALUM SUPER-E UL PREM CC (300	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HA3151A07	THRUBOLT STUD 1/2-13 X 20.000	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	8.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 ea
42EP3200A01	FR ENDPLATE, MACH	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
42EP1400A01	PUEP MACH,	1.000 ea
10XN3816K52	3/8-16 X 3-1/4 HEX HEAD CAP SCREW GRD 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
10CB1000A390	CONDUIT BOX, MACH	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B53	TERMINAL BURNDY KPA34	1.000 ea
10XN5013K10	1/2-13 X .625 HEX HD, GRADE 5	1.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea

10CB1500	STANDARD 10 FRAME CONDUIT BOX LID, CAST	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
42AD2001B01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.125 ga
42AD2001B01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 ea

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

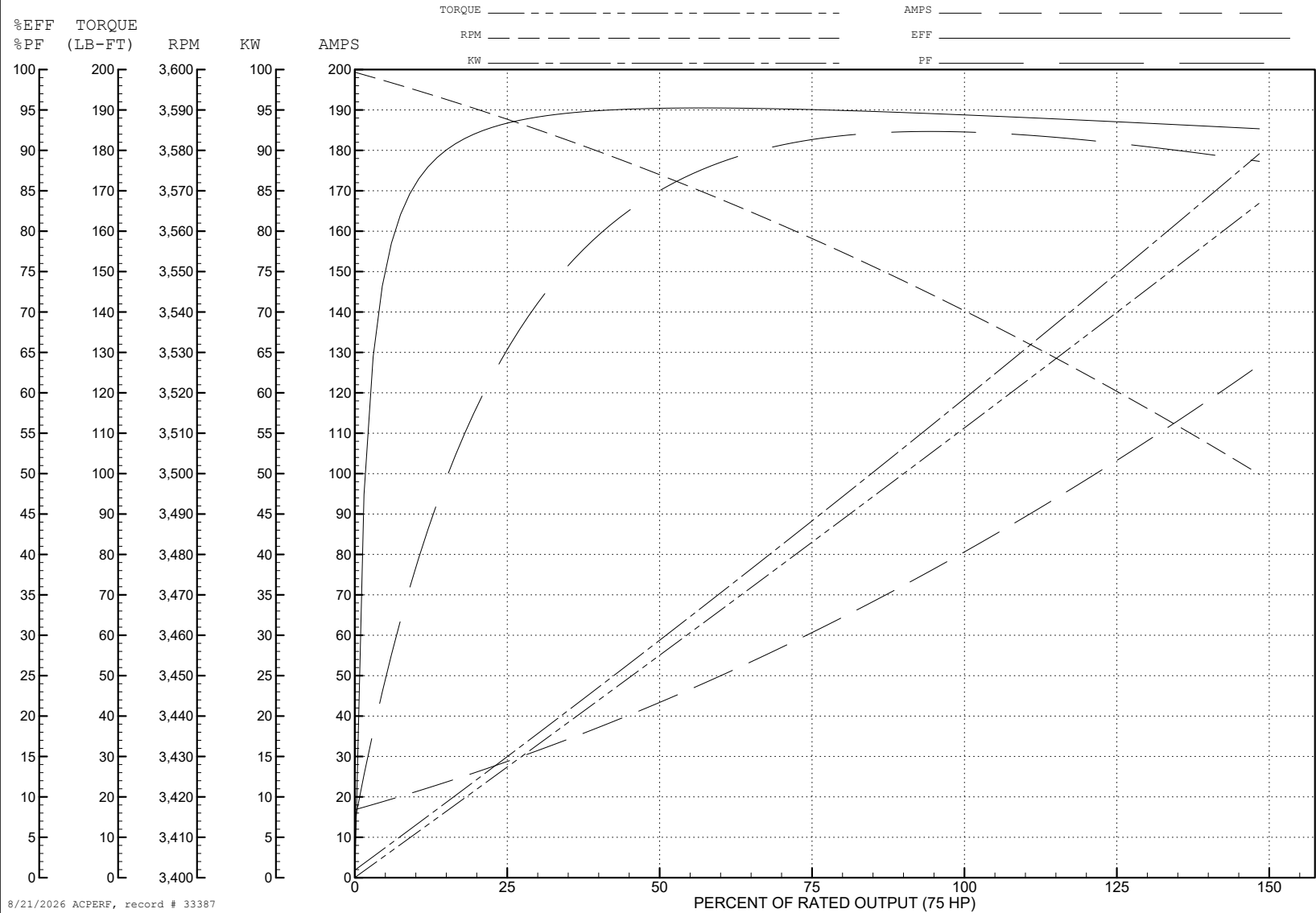
ABB Motors and Mechanical Inc.

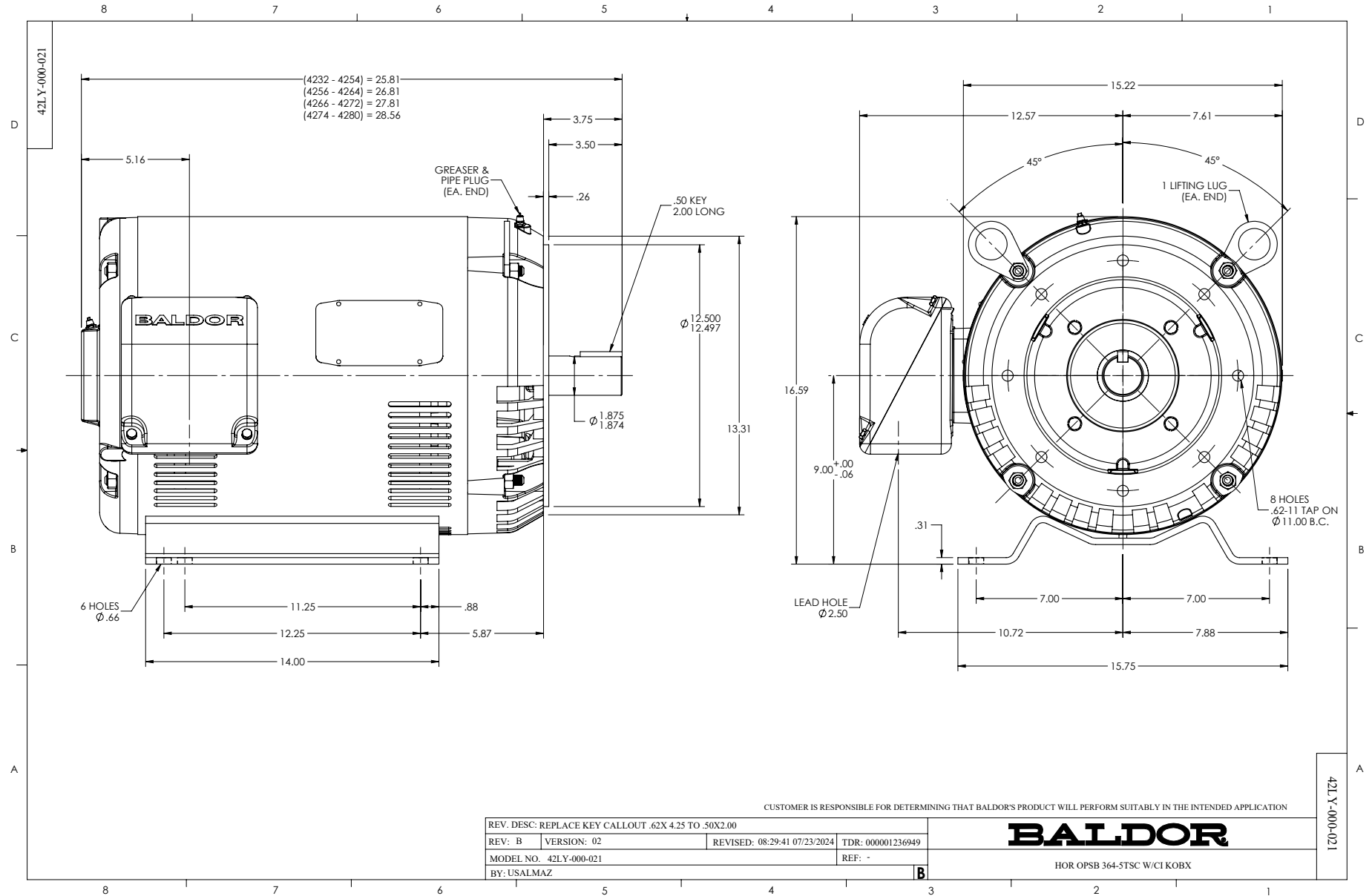
WINDING # 42WGW903

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

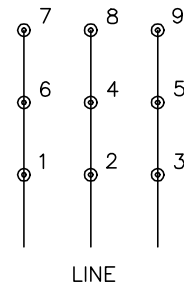




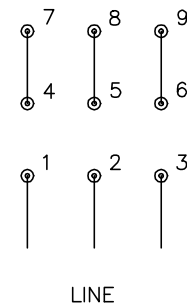
CD0180



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.

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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