

ABB BALDOR RELIANCE III

Customer information packet

CEM2550T-4G

100HP, 3525RPM, 3PH, 60HZ, 365TSC, OPSB, F1

Specifications

Enclosure	OPSB
Frame	365TSC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	100.000 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	CSA CSA EEV NEMA PREMIUM UR
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	109.000 A @ 460.0 V 218.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	109.0 a
Insulation Class	H
Inverter Code	Not Inverter

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	42WGW968
Layout	42LY-000-037
Eff. date	07-10-2024
CD Diagram	CD0006
Poles	02
Leads	3#4
Proprietary	False
Created date	09-16-2020

IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4272M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.81 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	Shaft Grounding
Shaft Rotation	Reversible
Speed	3525 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.	CEM2550T-4G				P/N						ENCL	OPSB
SPEC.	42-0000-0089		CC	010A		FRAME	365TSC		SER.NO.			
HP	100			CLASS		F	HZ	60				
RPM	3540			PH	3	DES		A				
VOLTS	460				CODE		G		ODE BRG	6311	DE BRG 6313	
AMPS	110											
RATING	40C AMB-CONT			NEMA-NOM-EFF				93.6		GREASE	POLYREX EM	
PF	91	SER.F.	1.15		CT30-60(2:1) VT3-60(20:1)							
USABLE AT	50HZ 75HP 380V 100A SF1.0											
HTR-VOLTS	HTR-AMPS		MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 48166

Typical performance - not guaranteed values

Winding: 42WGW968-R001				Type: 4266M		Enclosure: OPSB					
Nameplate Data				460 V, 60 Hz: High Voltage Connection							
Rated Output (HP)		100		Full Load Torque		148 LB-FT					
Volts		460		Start Configuration		direct on line					
Full Load Amps		110		Breakdown Torque		483 LB-FT					
R.P.M.		3540		Pull-up Torque		172 LB-FT					
Hz		60 Phase		3		Locked-rotor Torque		245 LB-FT			
NEMA Design Code		A		KVA Code		G		Starting Current		771 A	
Service Factor (S.F.)		1.15		No-load Current		23.5 A					
NEMA Nom. Eff.		93.6		Power Factor		91		Line-line Res. @ 25°C		0.0539 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		45°C					
S.F. Amps				Temp. Rise @ S.F. Load		55°C					
				Locked-rotor Power Factor		20.7					
				Rotor inertia		5.16 LB-FT2					

Load Characteristics 460 V, 60 Hz, 100 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	72	87	90	91	91	89	91
Efficiency	91.3	93.9	94	93.6	92.7	91.6	93
Speed	3584	3568	3552	3536	3518	3496	3525
Line amperes	36.1	57.7	82.8	110	138	169	127

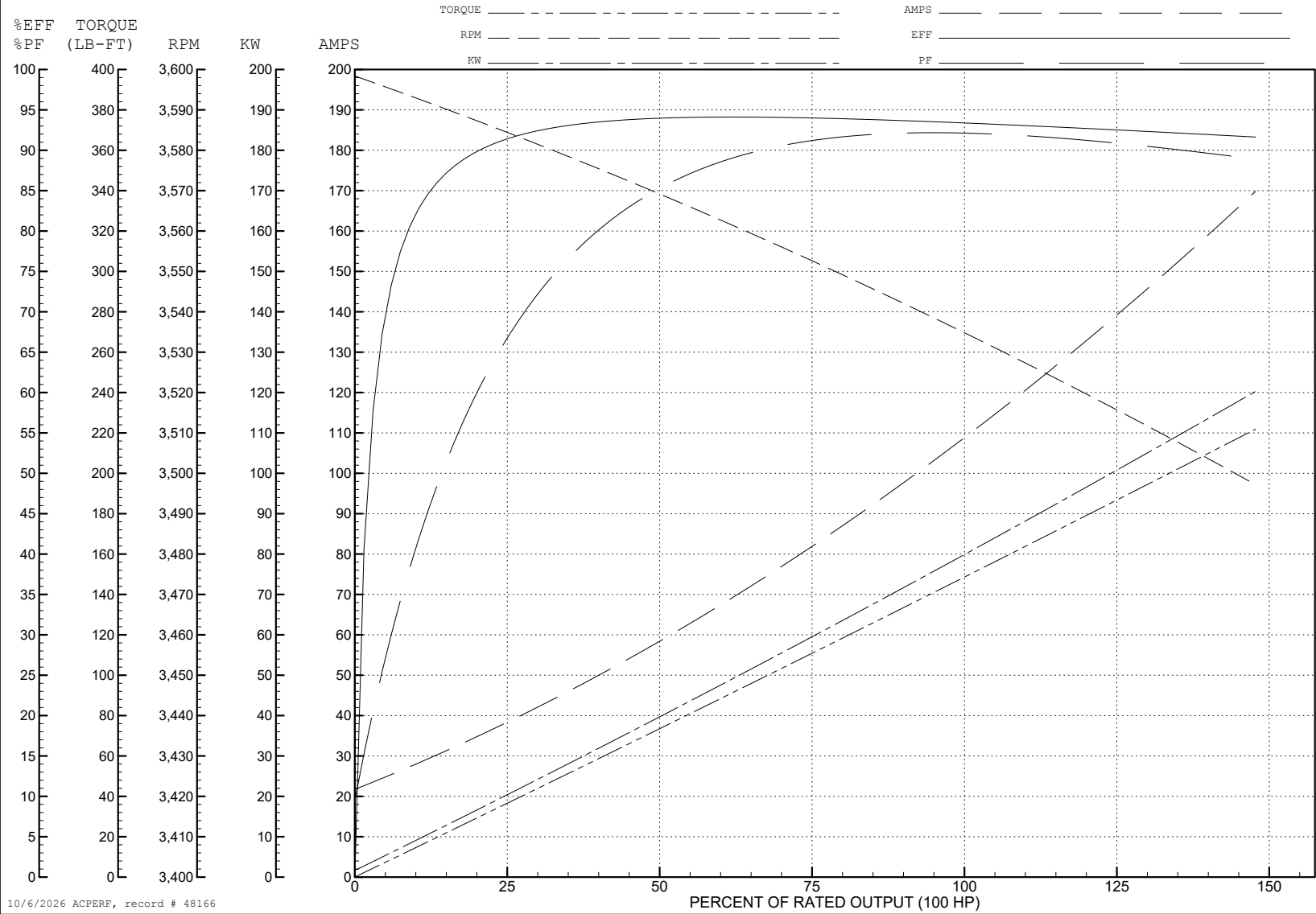
ABB Motors and Mechanical Inc.

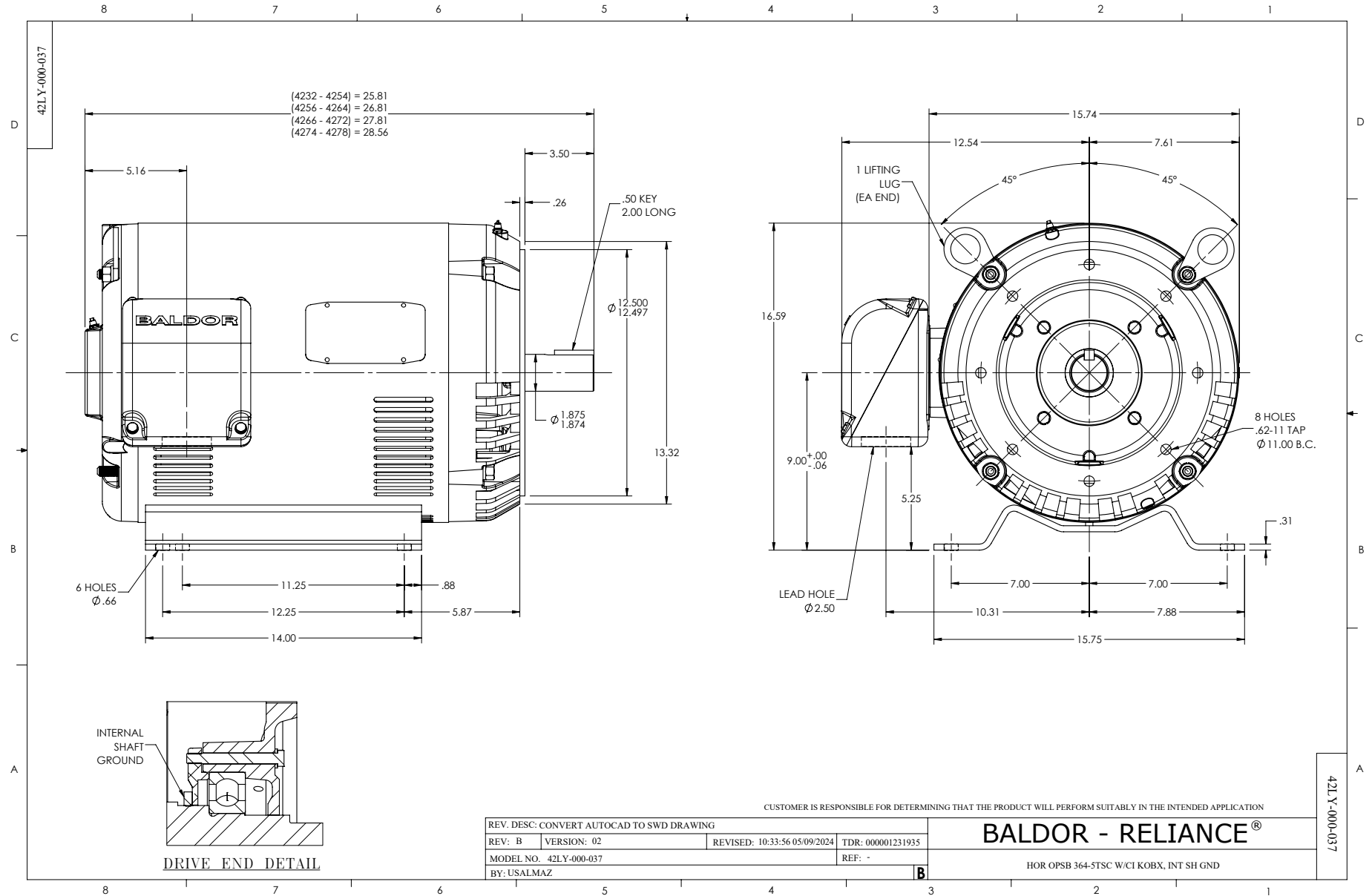
WINDING # 42WGW968

Typical performance - not guaranteed values.

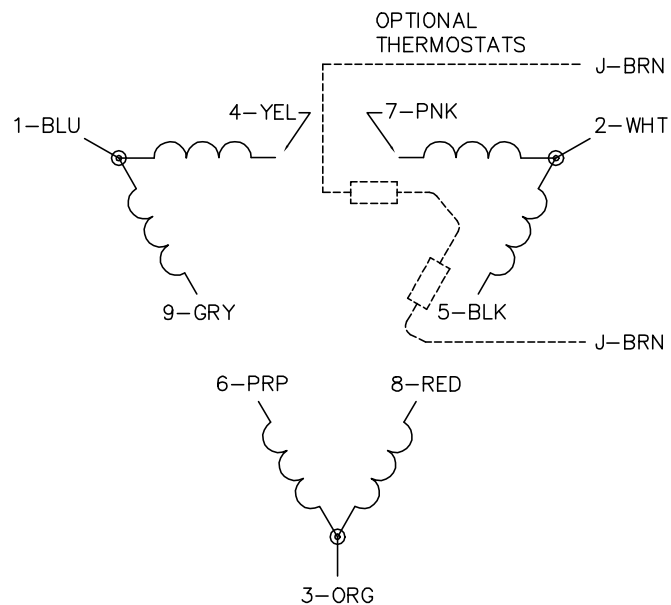
100 HP 3 PH 60 HZ 3540 RPM 460 V 4266M

TORQUES (LB-FT): PO=483 PU=172 LR=245 LRA=771

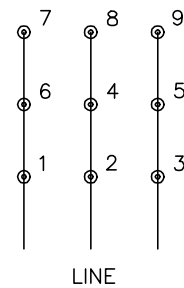




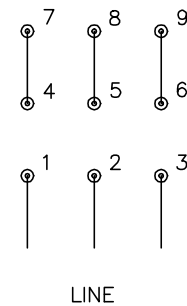
CD0180



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

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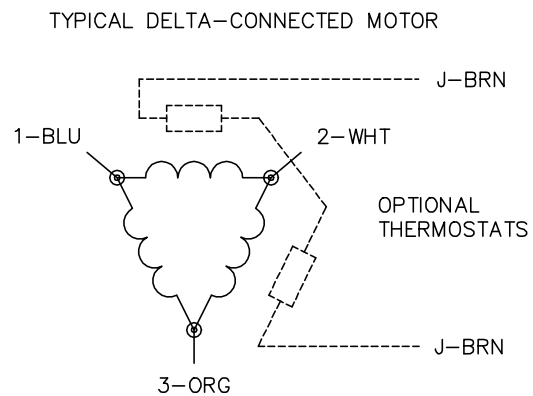
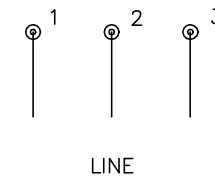
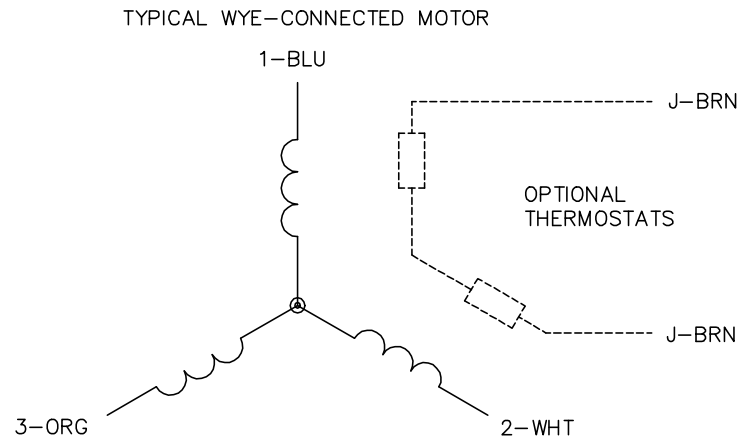


BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER 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 BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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