

**BALDOR • RELIANCE**

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# Customer information packet

## CEM2550T

100HP, 3540RPM, 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 EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	110.000 A @ 460.0 V 220.000 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	110.0 a
Insulation Class	F
Inverter Code	Inverter Ready

## Part detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	42WG937
Layout	42LY-000-021
Eff. date	02-12-2024
CD Diagram	CD0180
Poles	02
Leads	9#4
Proprietary	False
Created date	03-06-2020

<b>IP Rating</b>	NONE
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	4266M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	27.81 IN
<b>Power Factor</b>	91
<b>Product Family</b>	General Purpose
<b>Pulley Face Code</b>	C-Face
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	3540 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP2138L**

<b>CAT.NO.</b>	CEM2550T	<b>P/N</b>		<b>ENCLOSURE</b>	OPSB		
<b>SPEC.</b>	42-0000-0075	<b>CC</b>	010A	<b>FRAME</b>	365TSC	<b>S/N</b>	
<b>HP</b>	100	<b>CLASS</b>	F	<b>HZ</b>	60		
<b>RPM</b>	3540	<b>PH</b>	3	<b>DES</b>	A		
<b>VOLT</b>	230/460	<b>KVA-CODE</b>	G	<b>ODE BRG</b>	6311	<b>DE BRG</b>	6313
<b>AMP</b>	220/110						
<b>RATING</b>	40C AMB-CONT	<b>GREASE</b>	POLYREX EM				
<b>NEMA-NOM-EFF</b>	93.6	<b>PF</b>	91	<b>SER.F.</b>	1.15		
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>					

**AC Induction Motor Performance Data**

Record # 38382

Typical performance - not guaranteed values

<b>Winding: 42WGW937-R001</b>		<b>Type: 4266M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	100	<b>Full Load Torque</b>	148 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	220/110	<b>Breakdown Torque</b>	483 LB-FT		
<b>R.P.M.</b>	3540	<b>Pull-up Torque</b>	172 LB-FT		
<b>Hz</b>	60	<b>Locked-rotor Torque</b>	245 LB-FT		
<b>NEMA Design Code</b>	<b>Phase</b> 3	<b>Starting Current</b>	771 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	23.5 A		
<b>NEMA Nom. Eff.</b>	93.6	<b>Line-line Res. @ 25°C</b>	0.0539 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	45°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	55°C		
		<b>Locked-rotor Power Factor</b>	21		
		<b>Rotor inertia</b>	5.16 LB-FT <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 100 HP**

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

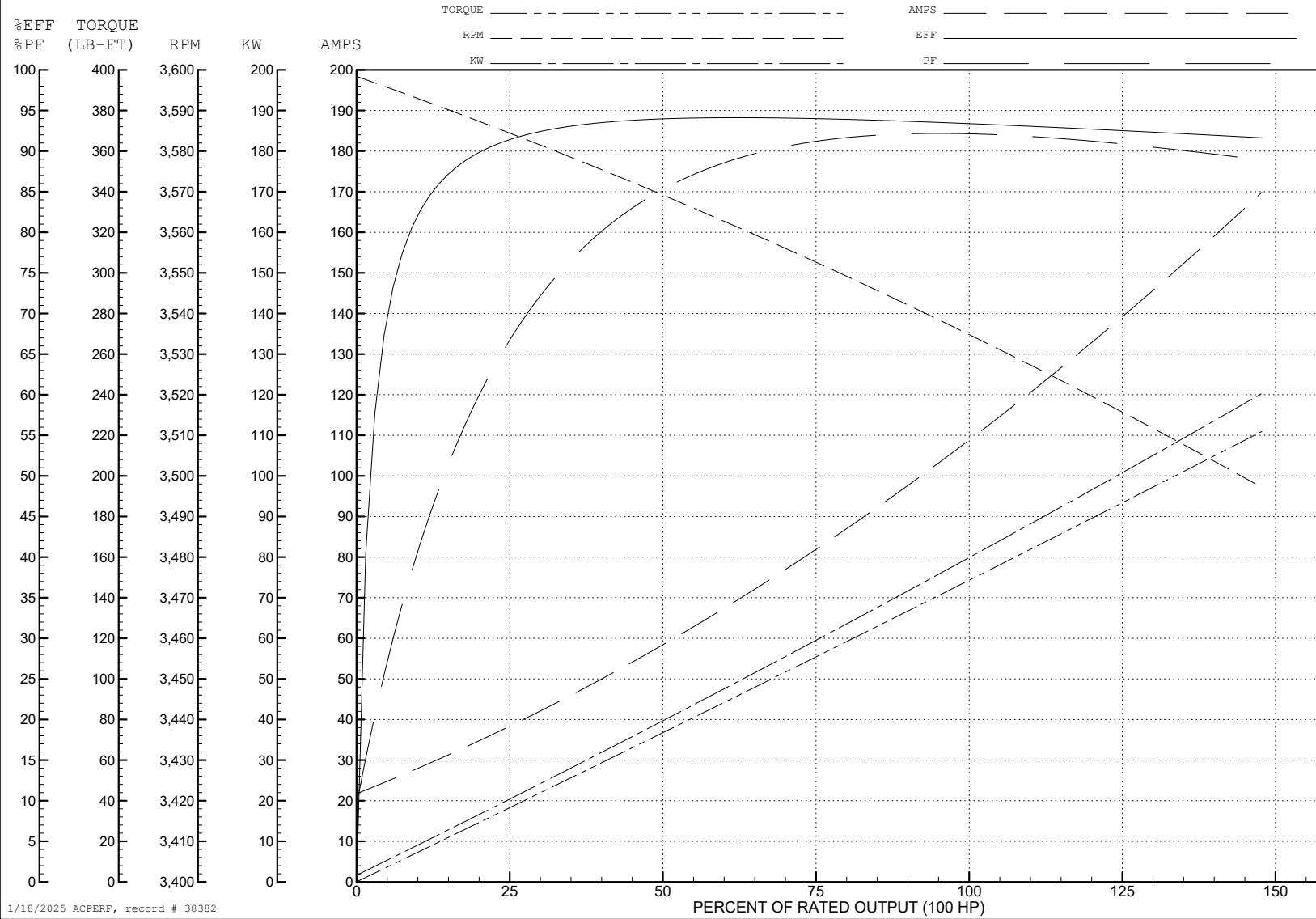
ABB Motors and Mechanical Inc.

WINDING # 42WGW937

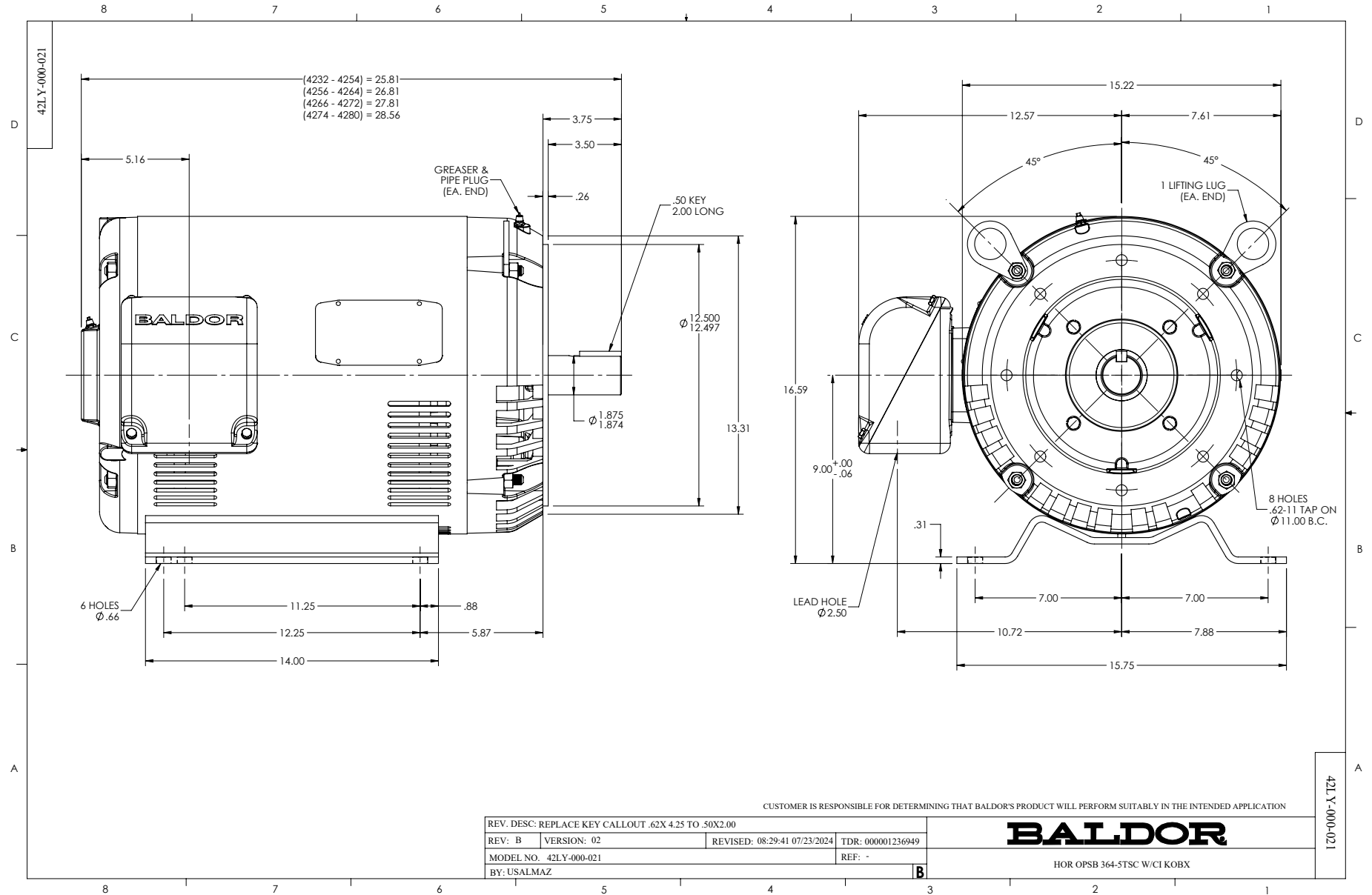
Typical performance - not guaranteed values.

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

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



1/18/2025 ACPERF, record # 38382



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

SH 1 of 1