

ABB BALDOR RELIANCE III

Customer information packet CEM2538T-G

40HP, 3530RPM, 3PH, 60HZ, 286TSC, OPSB, F1

Specifications

Enclosure	OPSB
Frame	286TSC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 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	46.000 A @ 460.0 V 92.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	46.0 a
Insulation Class	H
Inverter Code	Inverter Ready

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	40WGX194
Layout	40LY-000-038
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	03-06-2020

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	4046M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	22.44 IN
Power Factor	89
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	3530 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.	CEM2538T-G			P/N						ENCL	OPSB
SPEC.	40-0000837	CC	010A	FRAME		286TSC	SER.NO.				
HP	40		CLASS		H	HZ	60				
RPM	3530		PH	3	DES		B				
VOLTS	230/460			CODE		G	ODE BRG	6309	DE BRG	6311	
AMPS	92/46										
RATING	40C AMB-CONT		NEMA-NOM-EFF			92.4	GREASE	POLYREX EM			
PF	89	SER.F.	1.15		CT30-60(2:1) VT3-60(20:1)						
USABLE AT	50HZ 40HP 190/380V 112/56A				SF1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 53043

Typical performance - not guaranteed values

Winding: 40WGX194-R006				Type: 4046M		Enclosure: OPSB			
Nameplate Data				460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		40		Full Load Torque		59.6 LB-FT			
Volts		230/460		Start Configuration		direct on line			
Full Load Amps		92/46		Breakdown Torque		207 LB-FT			
R.P.M.		3530		Pull-up Torque		74.8 LB-FT			
Hz		60 Phase		3		Locked-rotor Torque		103 LB-FT	
NEMA Design Code		B		KVA Code		G		Starting Current	282 A
Service Factor (S.F.)		1.15		No-load Current		11.7 A			
NEMA Nom. Eff.		92.4		Power Factor		89		Line-line Res. @ 25°C	0.1848 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		35°C			
S.F. Amps				Temp. Rise @ S.F. Load		44°C			
				Locked-rotor Power Factor		24			
				Rotor inertia		1.97 LB-FT2			

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	66	82	88	89	90	90	90
Efficiency	91.4	93.7	93.7	93	92	90.7	92.4
Speed	3580.7	3565.4	3547.1	3527.4	3504.7	3481	3514
Line amperes	16.4	24.9	34.7	45.9	57	69.7	52.6

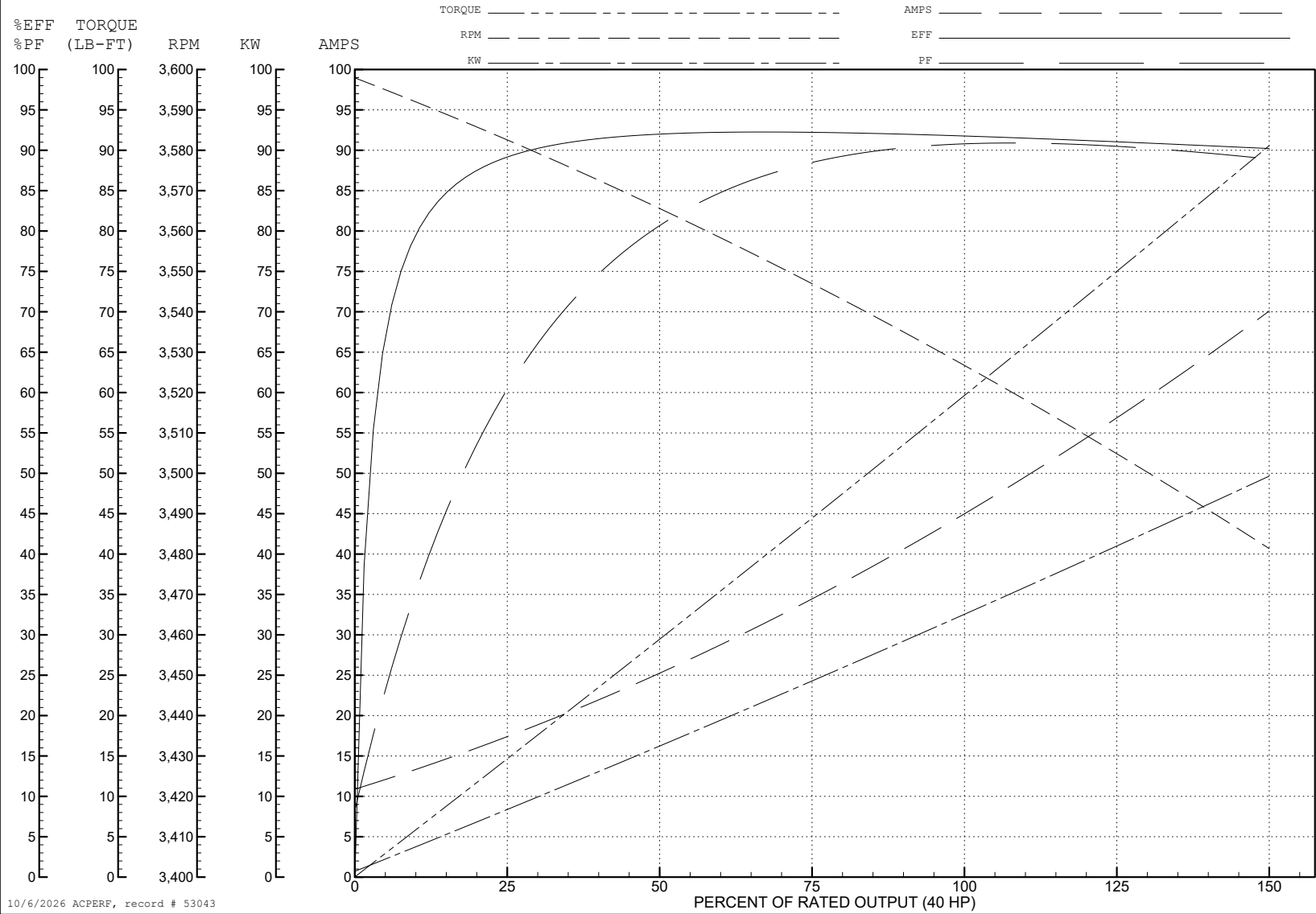
ABB Motors and Mechanical Inc.

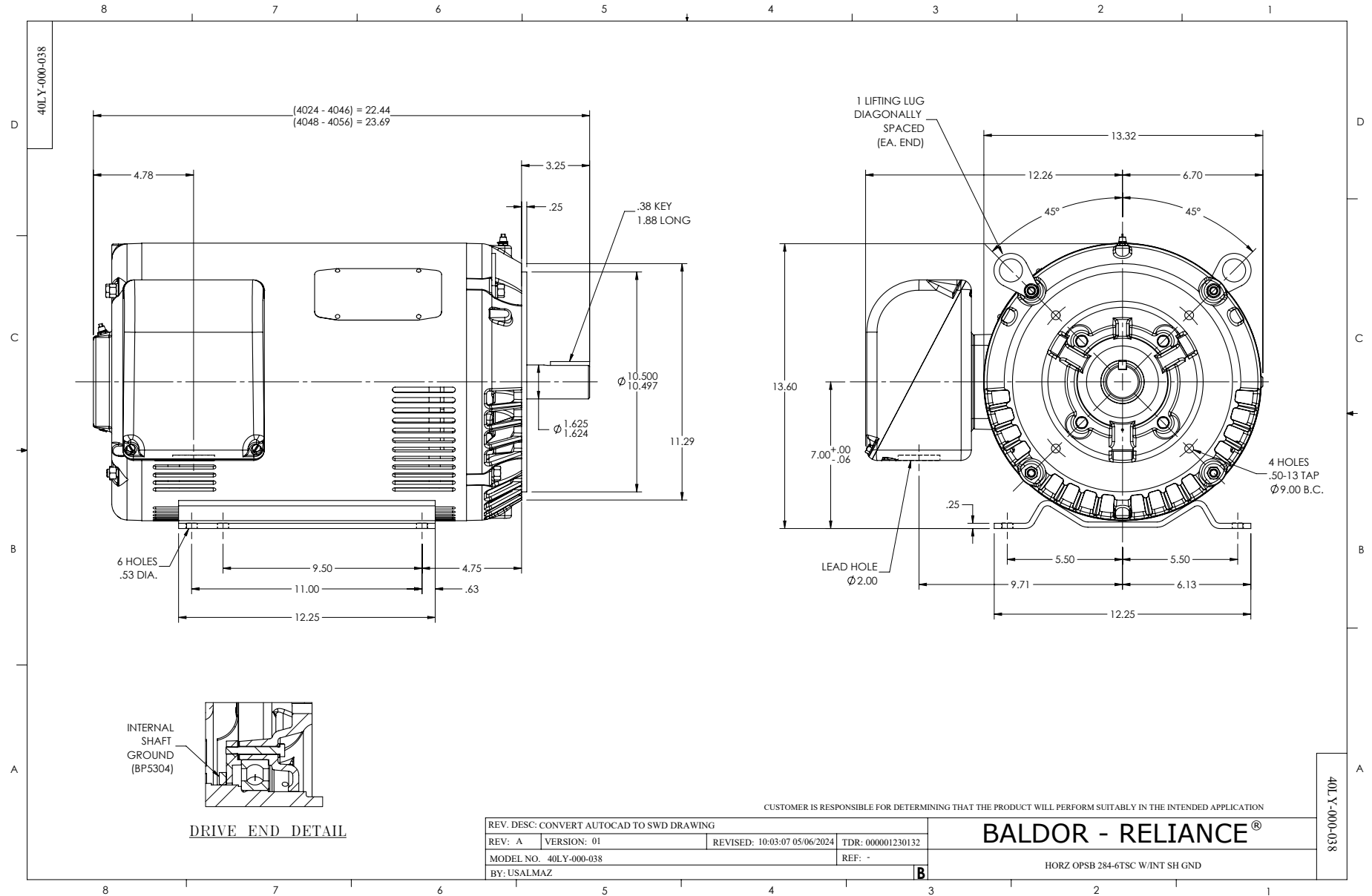
WINDING # 40WGX194

Typical performance - not guaranteed values.

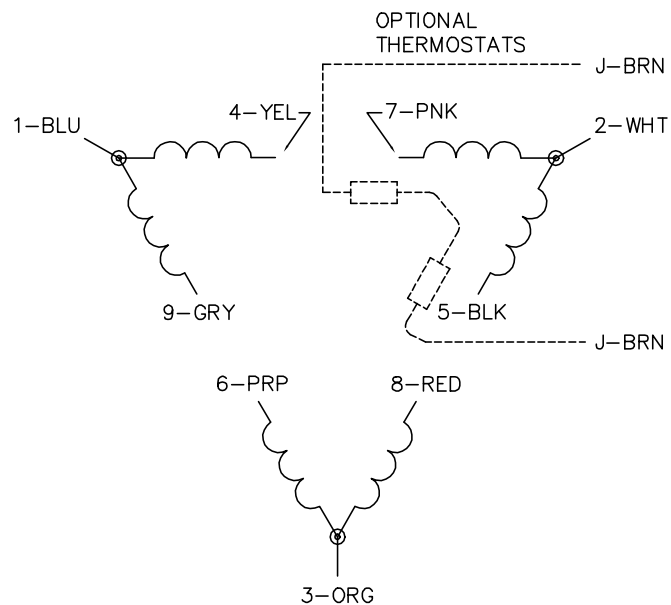
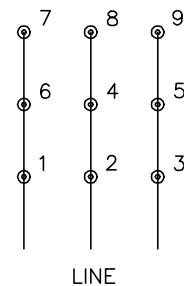
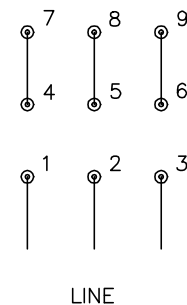
40 HP 3 PH 60 HZ 3530 RPM 460 V 4046M

TORQUES (LB-FT): PO=207 PU=74.8 LR=103 LRA=282





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

CD0180