

ABB BALDOR RELIANCE III

Customer information packet

CEM2531T-G

25HP, 1770RPM, 3PH, 60HZ, 284TC, OPSB, F1

Specifications

Enclosure	OPSB
Frame	284TC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	30.000 A @ 460.0 V 60.000 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	30.0 a
Insulation Class	H
Inverter Code	Inverter Duty

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	40WGX793
Layout	40LY-000-046
Eff. date	06-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	04-29-2020

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	4050M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.06 IN
Power Factor	82
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	1770 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.	CEM2531T-G			P/N						ENCL	OPSB
SPEC.	40-0000-0102	CC	010A	FRAME		284TC	SER.NO.				
HP	25		CLASS		H	HZ	60				
RPM	1770		PH	3	DES		A				
VOLTS	230/460			CODE		G	ODE BRG	6309	DE BRG	6311	
AMPS	60/30										
RATING	40C AMB-CONT		NEMA-NOM-EFF			93.6	GREASE	POLYREX EM			
PF	82	SER.F.	1.15		CT30-60(2:1) VT3-60(20:1)						
USABLE AT	50HZ 25HP 190/380V 72/36A				SF1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 48205

Typical performance - not guaranteed values

Winding: 40WGX793-R002			Type: 4050M		Enclosure: OPSB		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		25		Full Load Torque		74 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		60/30		Breakdown Torque		216 LB-FT	
R.P.M.		1770		Pull-up Torque		88.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		121 LB-FT	
NEMA Design Code		A	KVA Code	G		Starting Current	190 A
Service Factor (S.F.)		1.15		No-load Current		12.7 A	
NEMA Nom. Eff.		93.6	Power Factor	82		Line-line Res. @ 25°C	0.299 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		28°C	
S.F. Amps				Temp. Rise @ S.F. Load		34°C	
				Locked-rotor Power Factor		34	
				Rotor inertia		3.96 LB-FT2	

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	78	82	84	83	83
Efficiency	89.6	93	93.8	93.6	93.1	92.3	93.3
Speed	1793	1787	1781	1774	1766	1757	1769
Line amperes	14.3	18.6	24	30.4	37.2	44.9	34.5

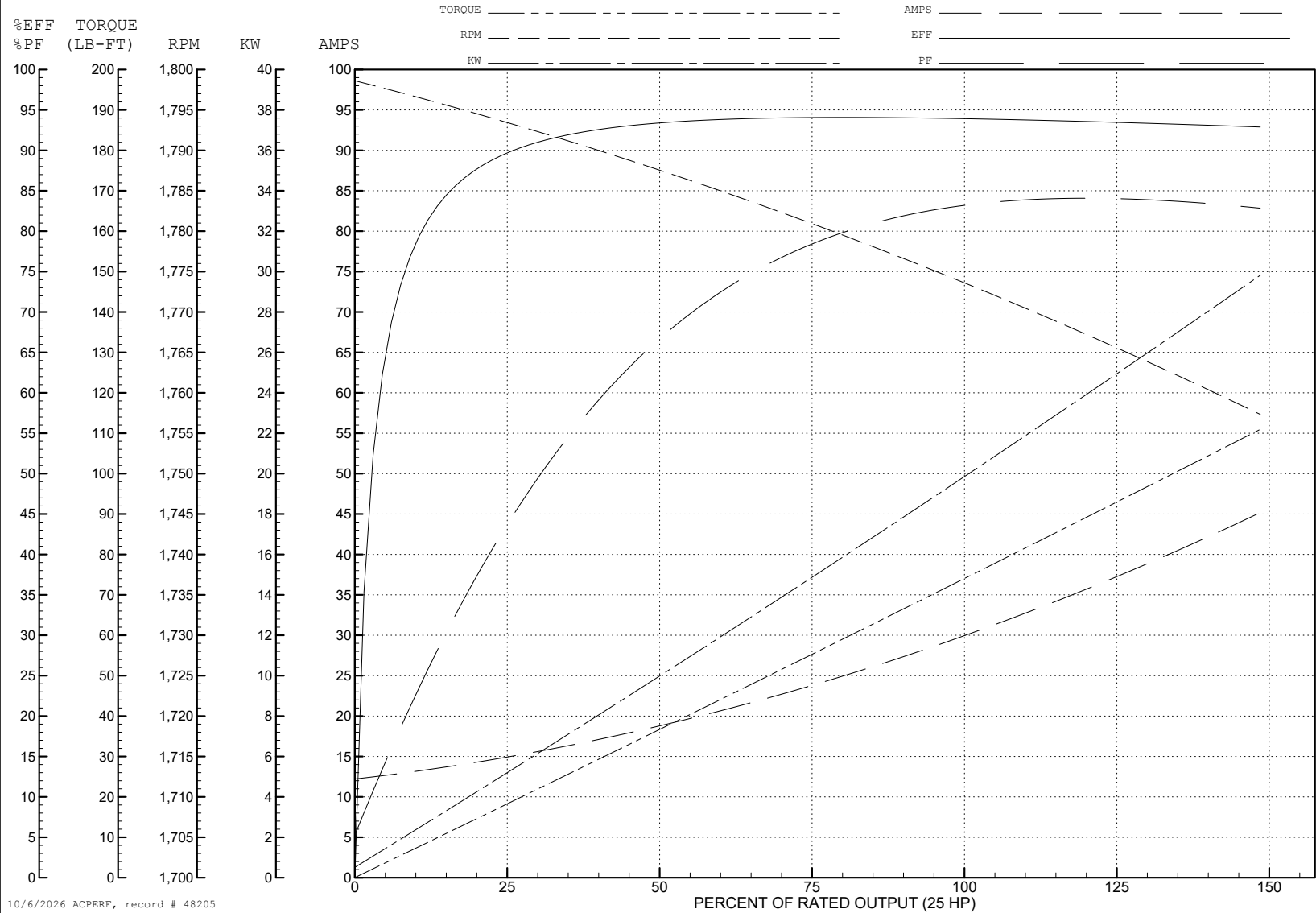
ABB Motors and Mechanical Inc.

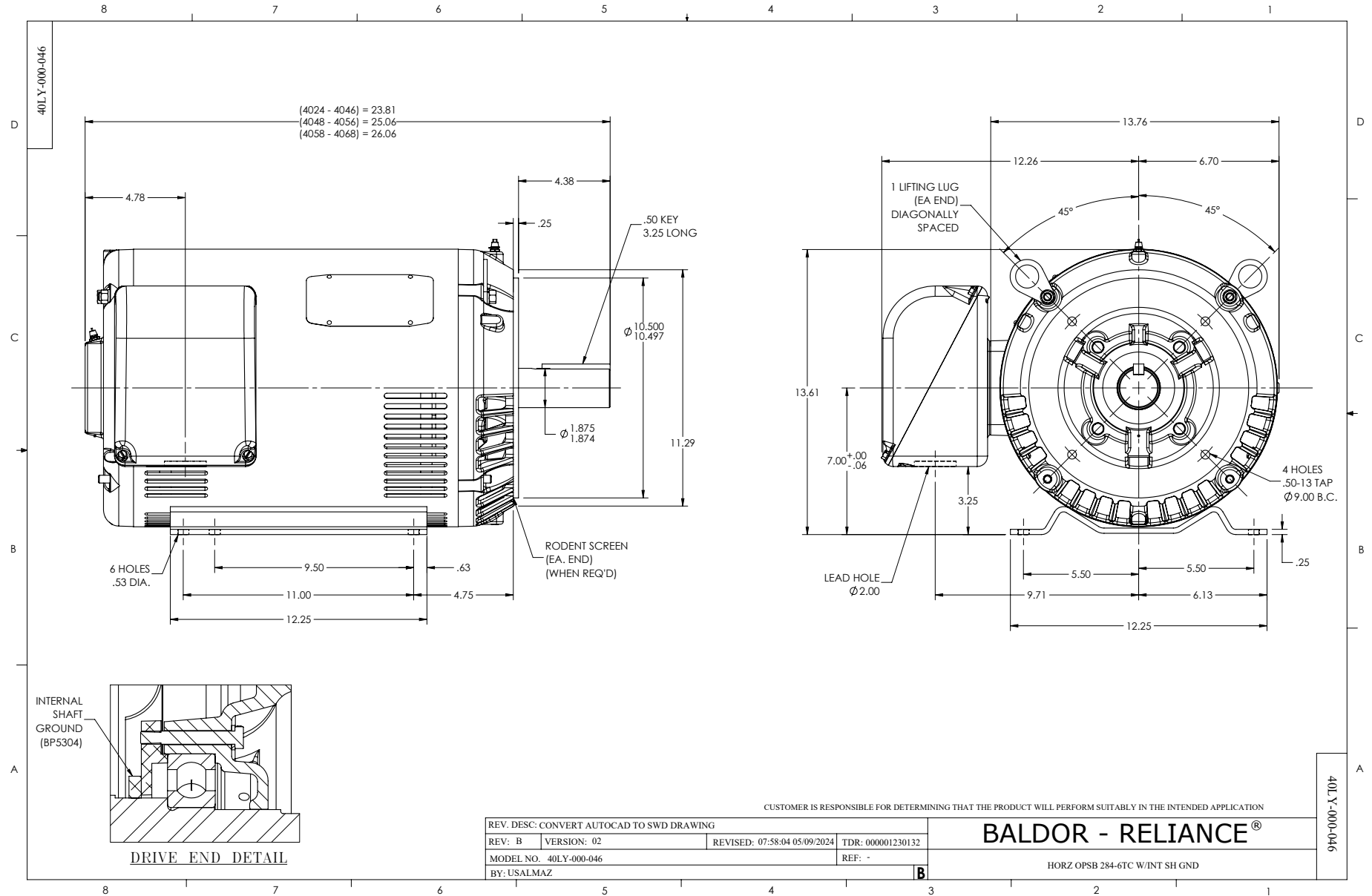
WINDING # 40WGX793

Typical performance - not guaranteed values.

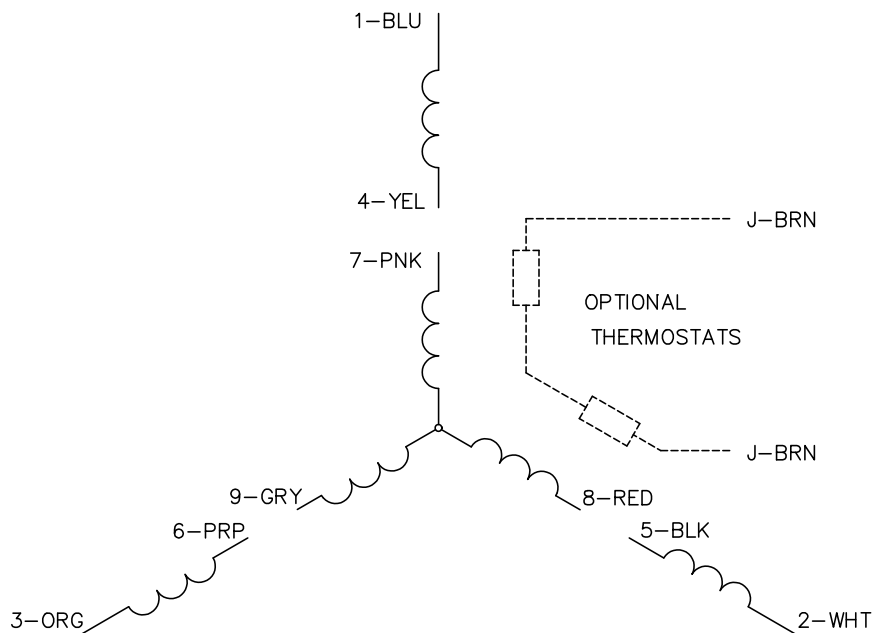
25 HP 3 PH 60 HZ 1770 RPM 460 V 4050M

TORQUES (LB-FT): PO=216 PU=88.8 LR=121 LRA=190

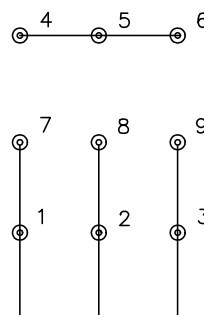




CD0005

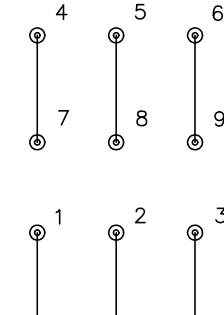


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP REVISED: 01/19/99 10:15 TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005