

ABB BALDOR RELIANCE III

Customer information packet

EM2539T-CI

40HP, 1770RPM, 3PH, 60HZ, 324T, 1250M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	324T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	40.000 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	NEMA PREMIUM CURUSEEV NEMA PREMIUM (OLD LOGO)
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	48.000 A @ 460.0 V 96.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	V
Type	AC
Mech. spec.	12B01
Base	
Status	PRD/A
Elec. spec.	12WGY580
Layout	12LYB001
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	05-14-2012

High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1250M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.13 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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.	EM2539T-CI			P/N						ENCL	OPEN
SPEC.	12B001Y580G1	CC	010A	FRAME		324T	SER.NO.				
HP	40		CLASS		F	HZ	60				
RPM	1775		PH	3	DES		A				
VOLTS	230/460			CODE		H	ODE BRG		6311	DE BRG	6311
AMPS	96/48										
RATING	40C AMB-CONT		NEMA-NOM-EFF				94.1	GREASE		POLYREX EM	
PF	82	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)							
USABLE AT	50HZ 40HP 190/380V 114/57A				SF 1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 66028

Typical performance - not guaranteed values

Winding: 12WGY580-R001				Type: 1250M		Enclosure: OPEN	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		40		Full Load Torque		118.8 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		96/48		Breakdown Torque		378 LB-FT	
R.P.M.		1775		Pull-up Torque		178 LB-FT	
Hz		60 Phase		Locked-rotor Torque		219 LB-FT	
NEMA Design Code		A KVA Code		Starting Current		324 A	
Service Factor (S.F.)		1.15		No-load Current		20 A	
NEMA Nom. Eff.		94.1 Power Factor		Line-line Res. @ 25°C		0.16075 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		32°C	
S.F. Amps				Temp. Rise @ S.F. Load		39°C	
				Locked-rotor Power Factor		27.3	

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	77	82	84	84	83
Efficiency	91.7	94.5	95	94.8	94.3	93.6	94.5
Speed	1795.1	1790.4	1785.1	1780	1773.8	1767.5	1776
Line amperes	23.2	29.8	38.5	48.4	59.2	71	54.9

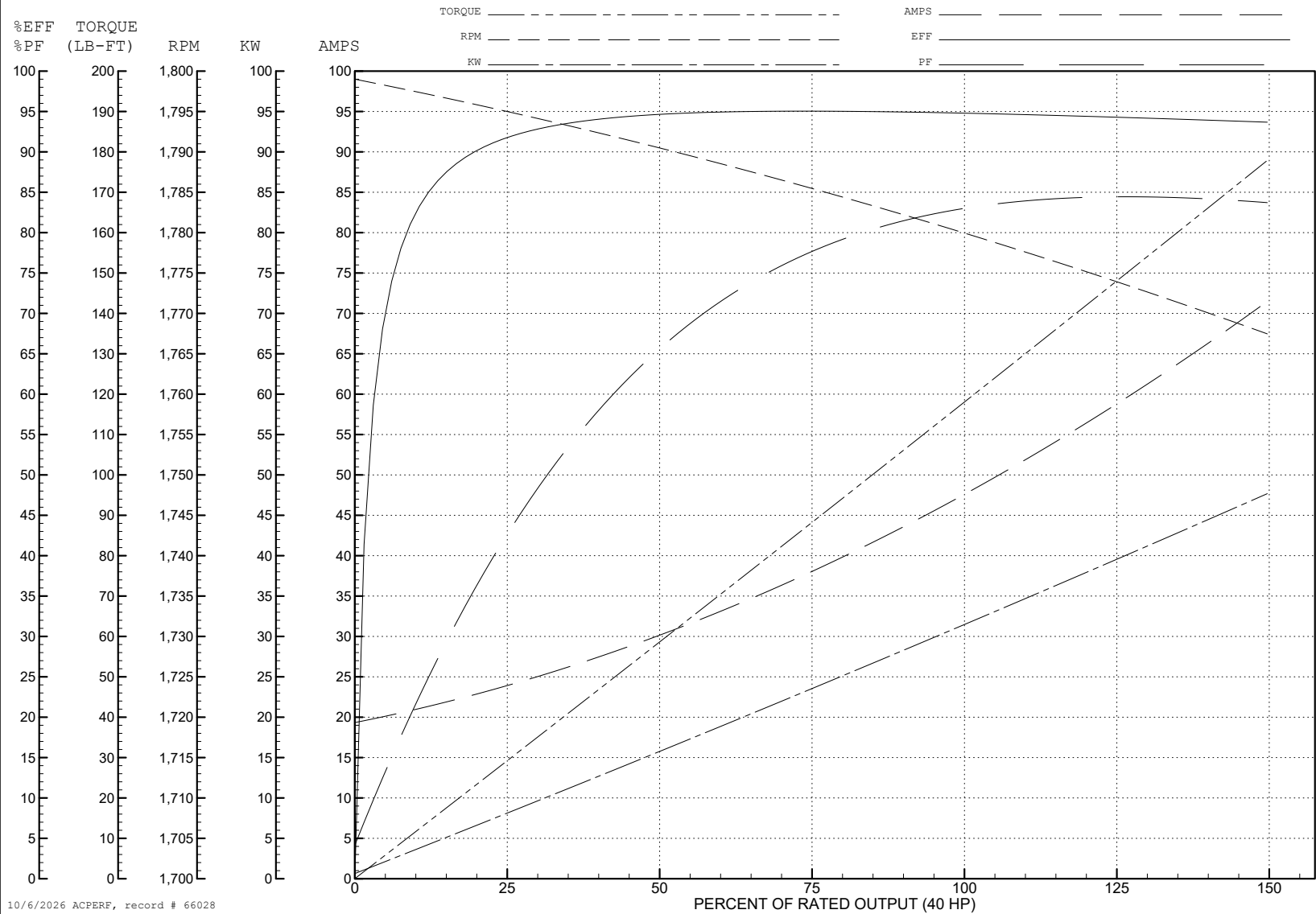
ABB Motors and Mechanical Inc.

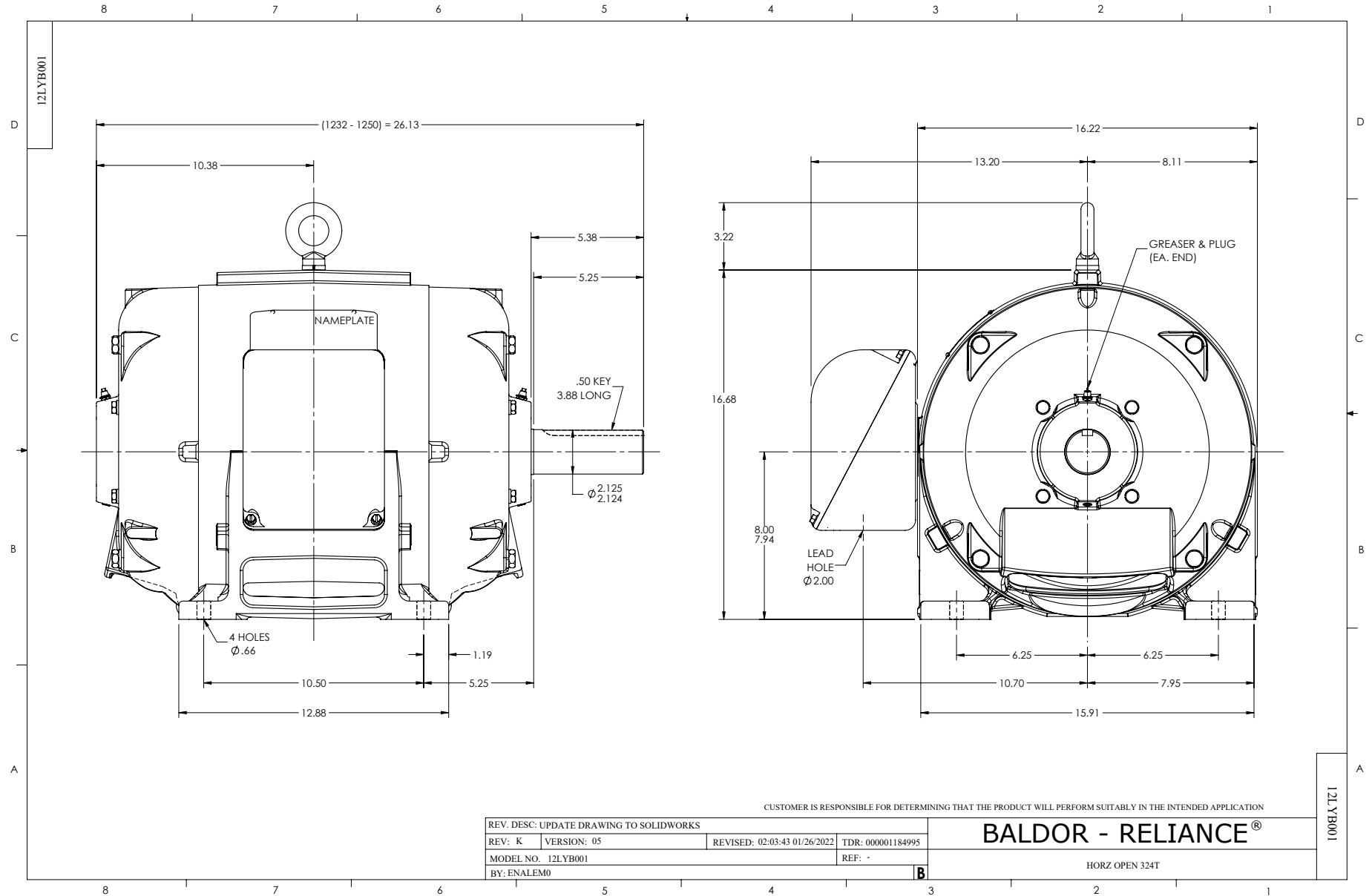
WINDING # 12WGY580

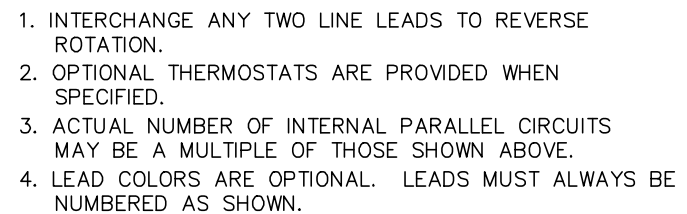
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1775 RPM 460 V 1250M

TORQUES (LB-FT): PO=378 PU=178 LR=219 LRA=324





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