

BALDOR • RELIANCE

Customer information packet

EBM2354TY

20HP, 1770RPM, 3PH, 60HZ, 256T, 0960M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256T
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	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	48.000 A @ 230.0 V 52.000 A @ 208.0 V 24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting
Front Shaft Indicator	None

Part detail

Revision	Q
Type	AC
Mech. spec.	09E427
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYE427
Eff. date	04-04-2024
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-17-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	32.71 IN
Power Factor	83
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
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

NP1259L									
CAT.NO.	EBM2354TY								
SPEC.	09E427T459G1								
HP	20								
VOLTS	230/460								
AMP	48/24								
RPM	1770								
FRAME	256T		HZ	60		PH	3		
SER.F.	1.15	CODE	J	DES	A	CL	F		
NEMA-NOM-EFF	93	PF	83						
RATING	40C AMB-CONT								
CC	010A								
DE	6309	ODE	6308						
ENCL	TEFC	SN							
	SFA 54.4/27.2								

AC Induction Motor Performance Data

Record # 67948

Typical performance - not guaranteed values

Winding: 09WGT459-R001		Type: 0960M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	59.27 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	48/24	Breakdown Torque	232 LB-FT		
R.P.M.	1770	Pull-up Torque	126 LB-FT		
Hz	60	Locked-rotor Torque	141 LB-FT		
NEMA Design Code	A	Starting Current	198 A		
Service Factor (S.F.)	1.15	No-load Current	10.4 A		
NEMA Nom. Eff.	93	Line-line Res. @ 25°C	0.33814 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	58°C		
S.F. Amps		Temp. Rise @ S.F. Load	70°C		
		Locked-rotor Power Factor	26.9		

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.6	93.1	92.4	93.3
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

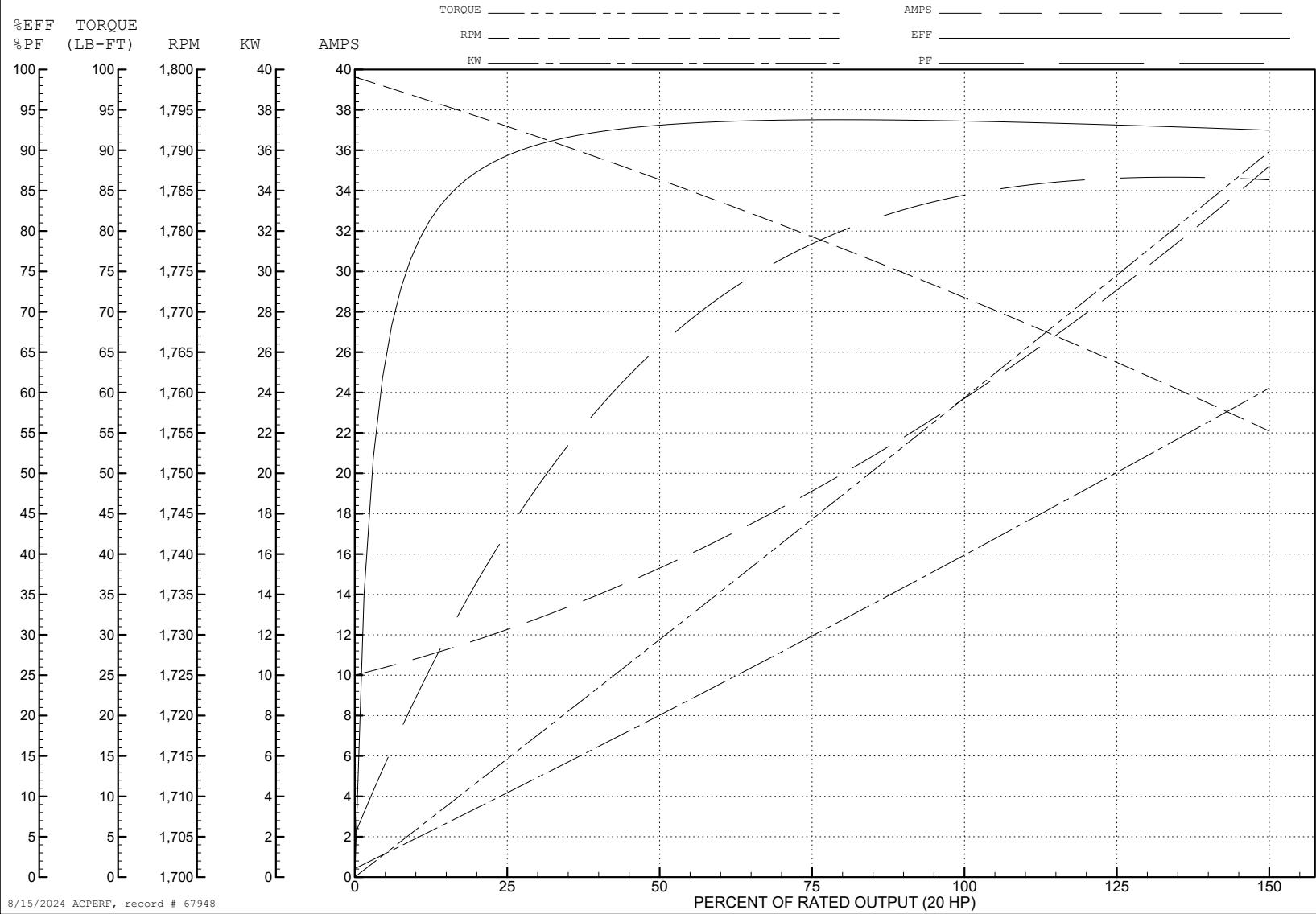
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

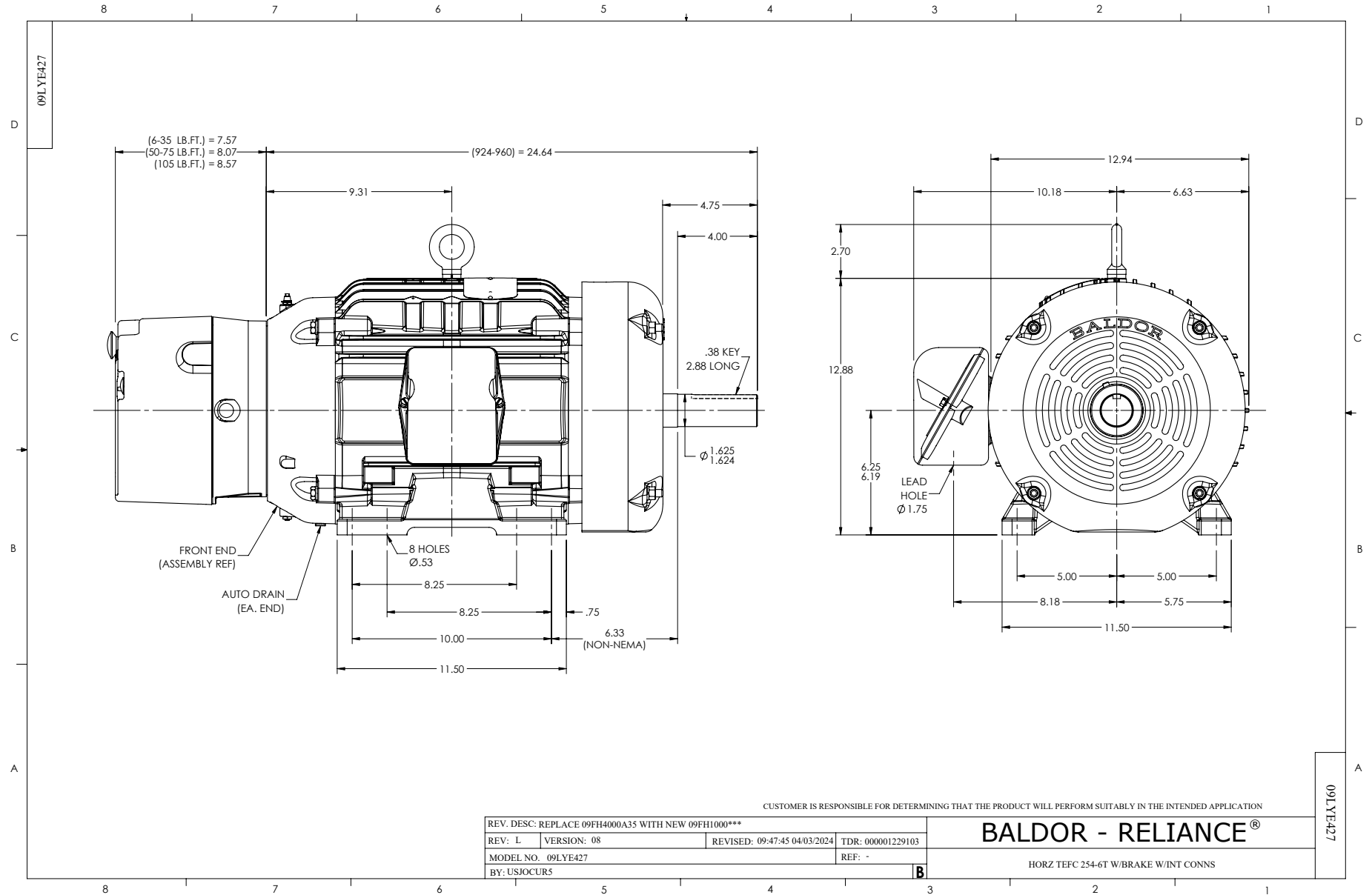
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

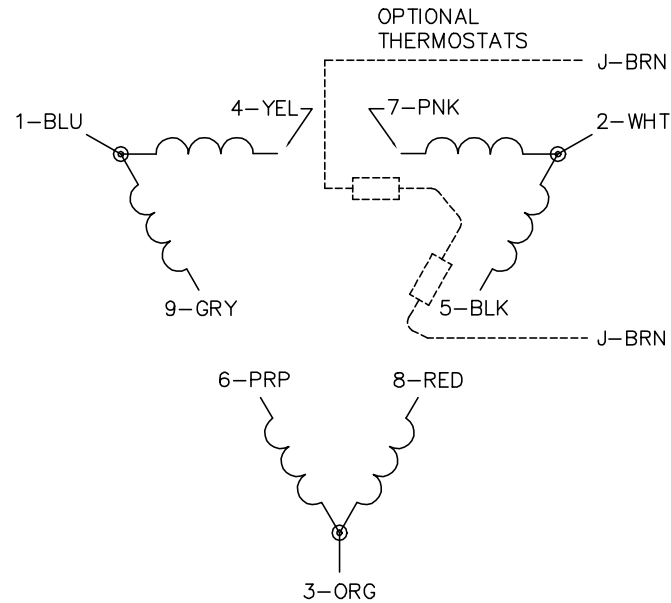
TORQUES (LB-FT): PO=232 PU=126 LR=141 LRA=198



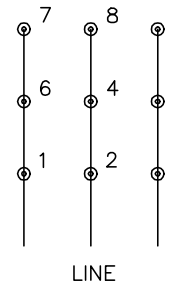
8/15/2024 ACPERF, record # 67948



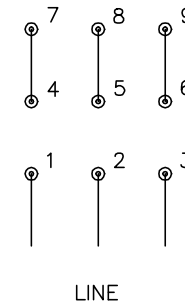
CD0180



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: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

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