ABB BALDOR RELIANCE

Customer information packet

EHFM2515T

20HP, 1765RPM, 3PH, 60HZ, 256T, 3948M, OPSB, F2
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPSB
Frame	256T
Frame Material	Steel
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	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	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	52.000 A @ 208.0 V
	48.000 A @ 230.0 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	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	P
Type	AC
Mech. spec.	39E172
Base	
Status	PRD/A
Elec. spec.	39WGX952
Layout	39LYE172
Eff. date	12-12-2025
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	06-22-2016

High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
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	3948M
Mounting Arrangement	F2
Number of Poles	4
Overall Length	23.19 IN
Power Factor	85
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	No Slinger
Speed	1765 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

NP2094E06B03									
CAT.NO.	EHFM2515T								
SPEC.	39E172X952G1								
HP	20								
VOLTS	230/460								
AMPS	48/24								
RPM	1765								
FRAME	256T	**HZ**	60		**PH**	3			
SER.F.	1.15	**CODE**	G	**DES**	A	**CL**	F		
NEMA-NOM-EFF	93	**PF**	85						
RATING	40C AMB-CONT								
CC	010A	**USABLE AT 208V**			N/A				
DE	6309	**ODE**	6208						
AUTO		**MANUAL**			**NONE**				
ENCL	OPSB	**SN**							
BLANK									

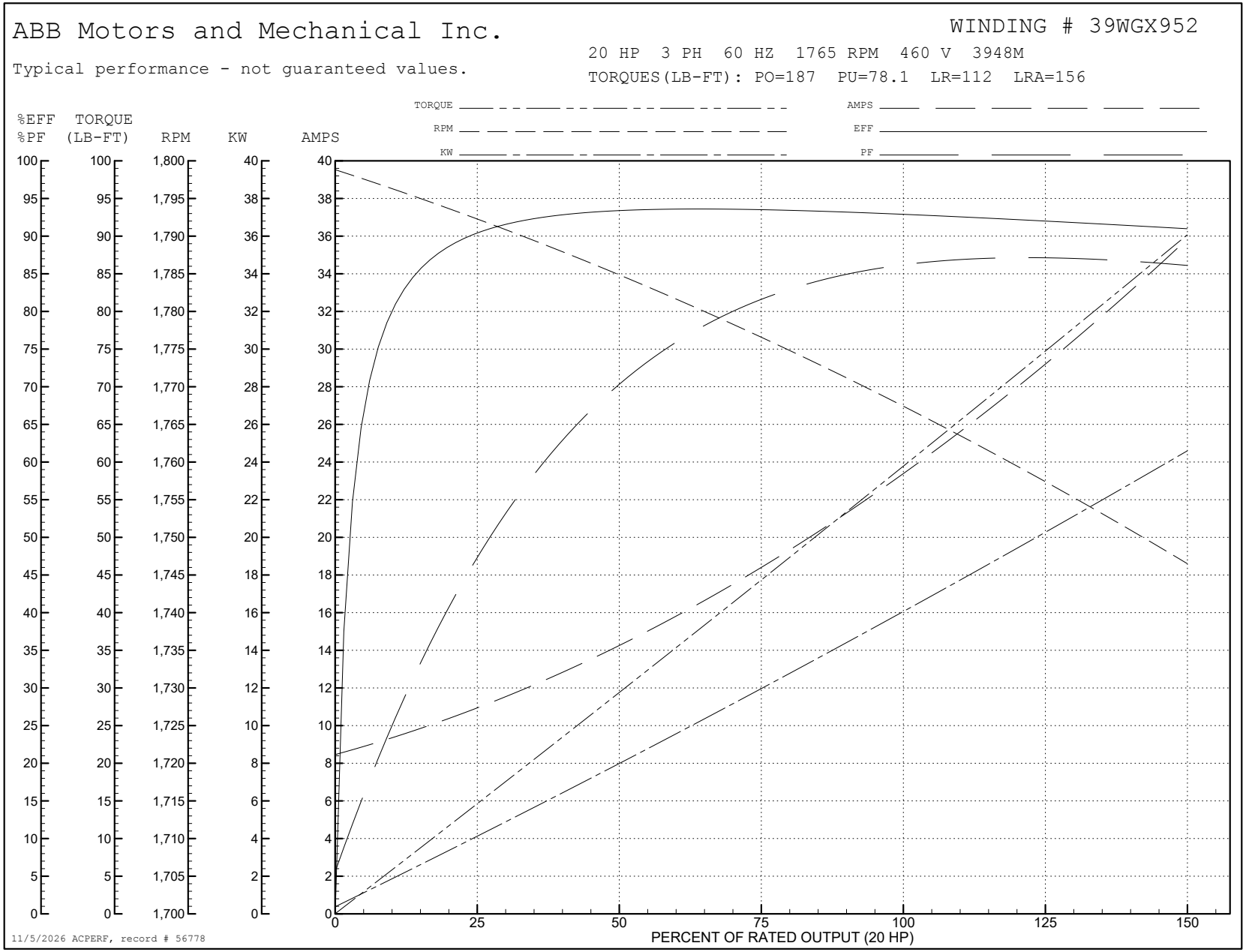
AC Induction Motor Performance Data
Record # 56778
Typical performance - not guaranteed values

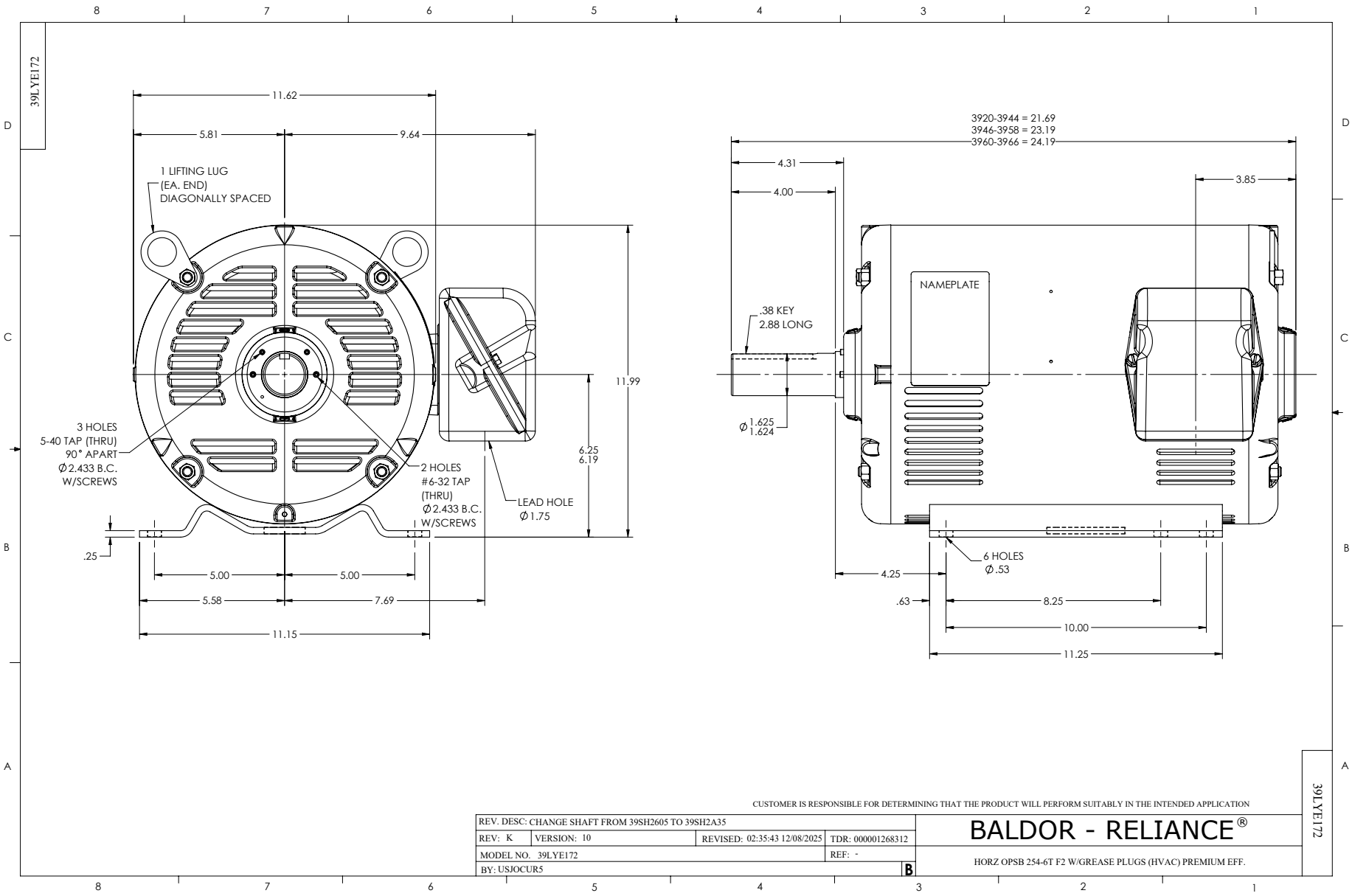
Winding: 39WGX952-R001	**Type:** 3948M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	59.7 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			48/24	**Breakdown Torque**	187 LB-FT
R.P.M.			1765	**Pull-up Torque**	78.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	112 LB-FT
NEMA Design Code	A	**KVA Code**	G	**Starting Current**	156 A
Service Factor (S.F.)			1.15	**No-load Current**	8.83 A
NEMA Nom. Eff.	93	**Power Factor**	85	**Line-line Res. @ 25ºC**	0.48438 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	37°C
S.F. Amps				**Temp. Rise @ S.F. Load**	46°C
				Locked-rotor Power Factor	33.3

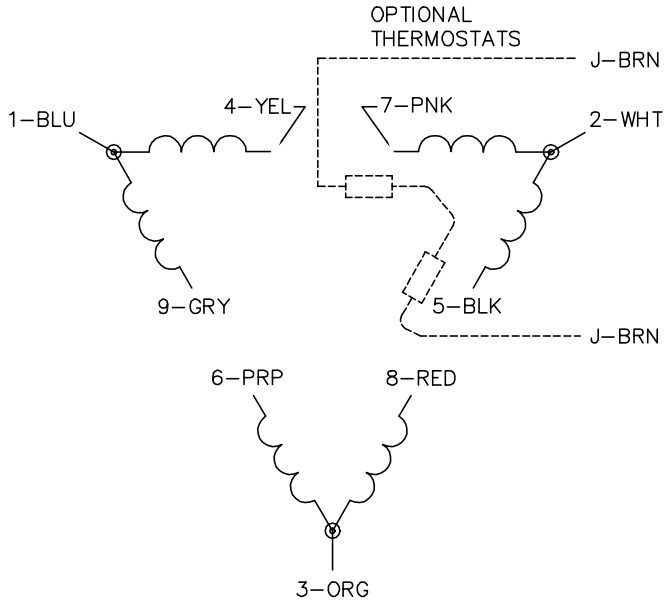
Load Characteristics 460 V, 60 Hz, 20 HP

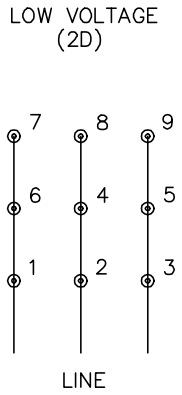
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	50	72	81	85	87	87	86
Efficiency	90.2	93.3	93.5	93	92.2	91	92.5
Speed	1792.2	1784.8	1776.1	1767.5	1757.6	1746.3	1762
Line amperes	10.5	14	18.6	23.8	29.4	35.6	27.2

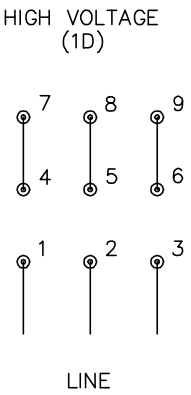

ABB Motors and Mechanical Inc.
WINDING # 39WGX952
Typical performance - not guaranteed values.
20 HP 3 PH 60 HZ 1765 RPM 460 V 3948M
TORQUES(LB-FT): PO=187 PU=78.1 LR=112 LRA=156
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
11/5/2026 ACPERF, record # 56778
PERCENT OF RATED OUTPUT (20 HP)


39LYE172
11.62
5.81
9.64
1 LIFTING LUG
(EA. END)
DIAGONALLY SPACED
11.99
6.25
6.19
3 HOLES
5-40 TAP (THRU)
90° APART
Ø2.433 B.C.
W/SCREWS
2 HOLES
#6-32 TAP
(THRU)
Ø2.433 B.C.
W/SCREWS
LEAD HOLE
Ø1.75
.25
5.00
5.00
5.58
7.69
11.15
3920-3944 = 21.69
3946-3958 = 23.19
3960-3966 = 24.19
4.31
4.00
3.85
NAMEPLATE
.38 KEY
2.88 LONG
Ø1.625
1.624
6 HOLES
Ø.53
4.25
.63
8.25
10.00
11.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE SHAFT FROM 39SH2605 TO 39SH2A35
REV: K
VERSION: 10
REVISED: 02:35:43 12/08/2025
TDR: 000001268312
MODEL NO. 39LYE172
REF: -
BY: USJOCUR5
B
BALDOR - RELIANCE®
HORZ OPSB 254-6T F2 W/GREASE PLUGS (HVAC) PREMIUM EFF.
39LYE172

CD0180







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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1