

BALDOR® • RELIANCE 

Product Information Packet

EH3M9139T

20HP,1760RPM,3PH,60HZ,256T,3952M,TEFC,F3

Part Detail							
Revision:	P	Status:	INA/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	39WGW453	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	39R078	Layout:	39LYR078	Poles:	04	Created Date:	
Base:	RG	Eff. Date:	05-18-2010	Leads:	9#10		

Specs			
Catalog Number:	EH3M9139T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	256T	KVA Code:	H
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	20.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 10 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3952M
Auxillary Box:	No Auxillary Box	Mounting Arrangement:	F3
Auxillary Box Lead Termination:	None	Power Factor:	89
Base Indicator:	Rigid	Product Family:	General Purpose
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley End Bearing Type:	Ball
Blower:	None	Pulley Face Code:	Standard
Current @ Voltage:	23.000 A @ 460.0 V	Pulley Shaft Indicator:	Standard
	46.000 A @ 230.0 V	Rodent Screen:	None
	49.900 A @ 208.0 V	Shaft Extension Location:	Pulley End
Design Code:	B	Shaft Ground Indicator:	No Shaft Grounding

Drip Cover:	No Drip Cover	Shaft Rotation:	Reversible
Duty Rating:	CONT	Shaft Slinger Indicator:	No Slinger
Electrically Isolated Bearing:	Not Electrically Isolated	Speed Code:	Single Speed
Feedback Device:	NO FEEDBACK	Motor Standards:	NEMA
Front Face Code:	Standard	Starting Method:	Direct on line
Front Shaft Indicator:	None	Thermal Device - Bearing:	None
Heater Indicator:	No Heater	Thermal Device - Winding:	None
		Vibration Sensor Indicator:	No Vibration Sensor

Nameplate NP1892A01											
CAT.NO.											
SPEC.	39R078W453G1										
HP	20										
VOLTS	230/460										
AMPS	46/23										
RPM	1760										
FRAME	256T					HZ	60			PH	3
SER.F.	1.15			CODE	H		DES	B		CL	F
NEMA-NOM-EFF	91.7			PF	89						
RATING	40C AMB-CONT										
CC	010A						USABLE AT 200V	49.9			
DE	6309				ODE	6208					
AUTO				MANUAL			NONE				
ENCL	TEFC			SN							
BLANK											

Parts List		
Part Number	Description	Quantity
SA080801	SA 39R078W453G1	1.000 EA
RA074193	RA 39R078W453G1	1.000 EA
HA6016	ADAPTER, CAST CONDUIT BOX	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
09CB3000SP	CONDUIT BOX CAST	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	2.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
39EP1100A03	STD FR EP-ENCL-TEFC	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
39EP1101A01	STD PU EP-ENCL-TEFC	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
09FH4000A31M	FAN COVER, STAMPED	1.000 EA
HA2001B08	SPL SPACER FOR AIR DEFLECTOR .50 O.D. X	3.000 EA
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	3.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 EA
09CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
09GS1001SP	GASKET-CONDUIT BOX LID, 1/16 THICK LEXID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.030 LB

Parts List (continued)		
Part Number	Description	Quantity
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
HA3154A02	STUD, 3/8-16 X 15.875 DEMBY	4.000 EA
09FN5001A01	STD EXT FAN ASS'Y W/09FN3001A01	1.000 EA
MG1000G59	PAINT, 689.959 WILKO SILVER	0.050 GA
LB1172A01	CUSTOM MTR CARTON LABEL LASER PRINTER	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
NP1892A01	NP LABEL W/CD0005 (FOR PREM EFFICIENCY H	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA
LB1417	LABEL CARTON 6X4 PERFORATED BLANK ROLLS	1.000 EA

Accessories		
Part Number	Description	Multiplier
09-1309	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 12756

Typical performance - not guaranteed values

Winding: 39WGW453-R001		Type: 3952M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	60 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	46/23	Breakdown Torque	130 LB-FT		
R.P.M.	1760	Pull-up Torque	97 LB-FT		
Hz	60 Phase	Locked-rotor Torque	119 LB-FT		
NEMA Design Code	B	Starting Current	164 A		
Service Factor (S.F.)	1.15	No-load Current	8.69 A		
NEMA Nom. Eff.	91.7	Line-line Res. @ 25°C	0.365 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	80°C		
S.F. Amps		Temp. Rise @ S.F. Load	97°C		
		Locked-rotor Power Factor	33		
		Rotor inertia	2.27 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	85	84	87	88	88	88
Efficiency	86.1	91	91.9	91.7	91	89.9	91.3
Speed	1790	1781	1771	1760	1749	1735	1753
Line amperes	10.2	13.8	18.4	23.7	29.3	36.4	27.06

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

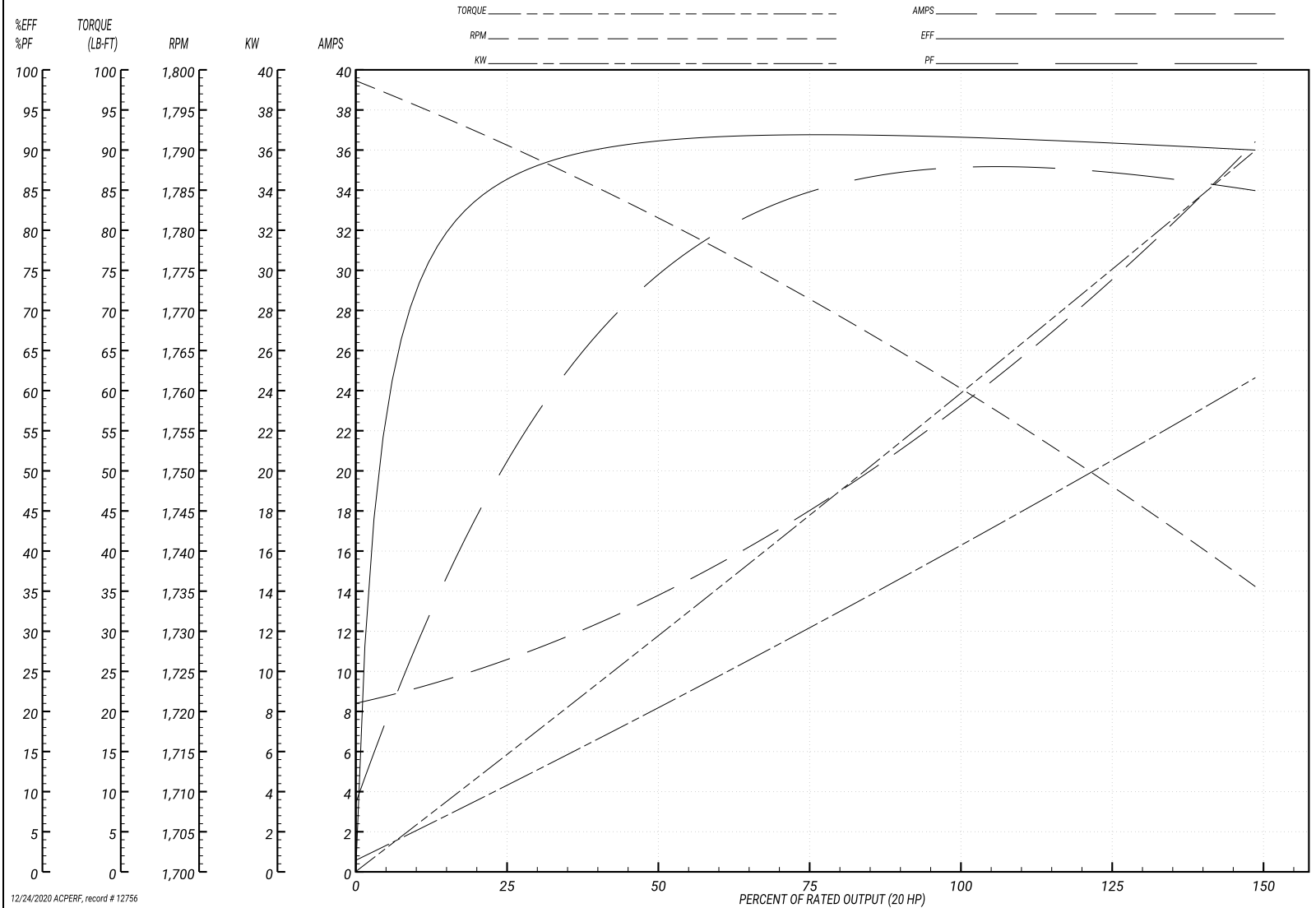
ABB Motors and Mechanical Inc.

WINDING # 39WGW453

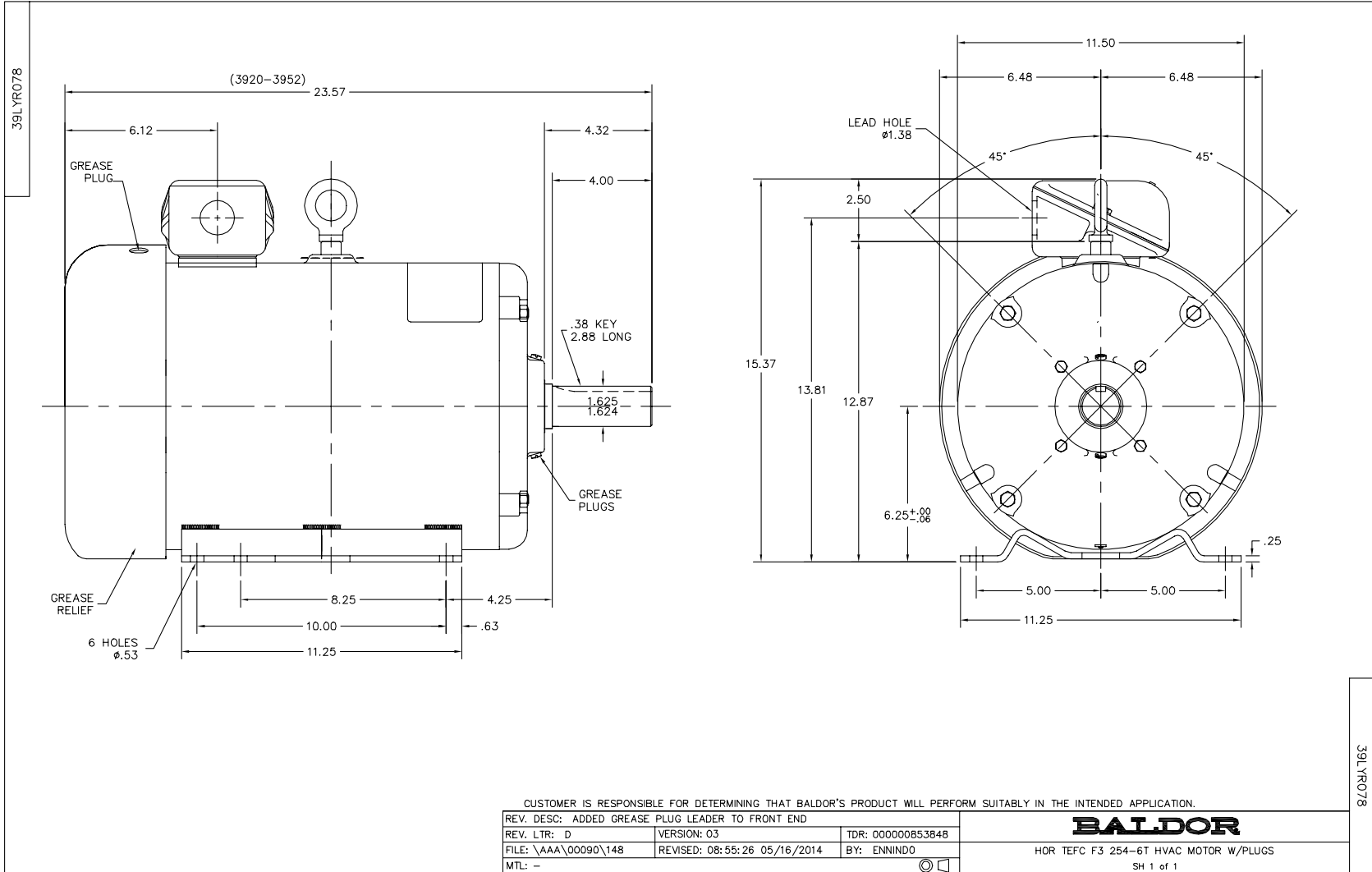
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1760 RPM 460 V 3952M

TORQUES(LB-FT): PO=130 PU=97 LR=119 LRA=164



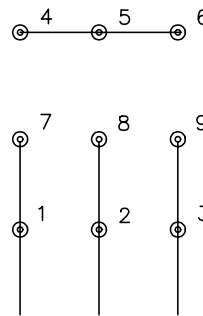
12/24/2020 ACPERF, record # 12756



CD0005

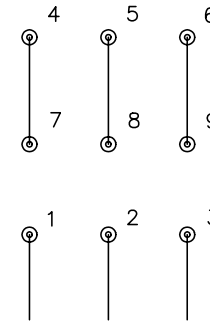


LOW VOLTAGE
(2Y)



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005