

ABB BALDOR RELIANCE III

Customer information packet

EWDM23934T

20HP, 1765RPM, 3PH, 60HZ, 256T, 3952M, TEFC, F1

Class -

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256T
Frame Material	Steel
Frequency	60.00 Hz
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 CSA EEV
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	X
Type	AC
Mech. spec.	39J10
Base	
Status	PRD/A
Elec. spec.	39WGW766
Layout	39LYJ010
Eff. date	02-14-2024
CD Diagram	CD0180
Poles	04
Leads	9#12
Proprietary	False
Created date	05-20-2014

High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3952M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.57 IN
Power Factor	84
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
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	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

Nameplate

NP1669L									
CAT.NO.	EWDM23934T								
SPEC.	39J010W766G2								
HP	20								
VOLTS	230/460								
AMP	48/24								
RPM	1765								
FRAME	256T		HZ	60			PH	3	
SER.F.	1.15	CODE	H	DES	A	CLASS	F		
NEMA-NOM-EFF	93	PF	84						
RATING	40C AMB-CONT								
CC	010A								
DE	6309		ODE	6208					
ENCL	TEFC	SN							
BLANK	20:1 CT 20:1 VT								

Parts List

Part number	Description	Quantity
SA281290	SA 39J010W766G2	1.000 ea
RA267744	RA 39J010W766G2	1.000 ea
HA6016P	ADAPTER, CAST CONDUIT BOX EPOXY PRIMER	1.000 ea
09GS1006	GASKET, CONDUIT BOX, NEOP-1/16 THICK-BLA	1.000 ea
09CB3000A02P	SPL 309 CONDUIT BOX W/1.25 N.P.T. W/PRI	1.000 ea
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
39EP1100A08WP	FR ENDPLATE, MACH W/WHITE EPOXY, PRIMED	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
39EP1101A08P	SPL FR ENDPLATE W/EPOXY PRIMER LESS RET	1.000 ea
HW4600B53	SEAL 1.688 X 2.275 X 0.312 SINGLE LIP DB	1.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
XY3816S12	3/8-16 HEX FINISHED NUT SS	8.000 ea
09FH4000A23MWP	FAN COVER, MACH W/WHITE EPOXY	1.000 ea
HA2101A05	SS SPACER,SCH 40,.25" SS PIPE,.625" LONG	3.000 ea
10XN2520S20	1/4-20X 1 1/4 HEX HD CAP SS	3.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	3.000 ea
09CB3500P	CONDUIT BOX LID, CAST W/PRIMER	1.000 ea
09GS1001A01	GASKET, BOX LID, 1/8 THICK BLACK NEOPREN	1.000 ea
19XT2520S12	1/4-20X3/4 HWH NO SLOT TY.23 18-8 S.S.	2.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	2.000 ea
HW2502G25	#303 SS,SQ KEY 3/8 X 2.880	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
HA5027A01	HA4066A01 T-DRAIN X2 BAGGED	1.000 ea
09GS1017	GASKET, CONDUIT BOX, .125 THICK BLACK NE	1.000 ea
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea

MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
HA3154S02	THRUBOLT STUD 3/8-16 X 15.875 SS	4.000 ea
37FN3002C02	EXFN, PLASTIC, 6.00 OD, 1.503 ID	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1025W01	WILKOFAS, 781.01, SIGNAL WHITE #9003	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP1669L	SS WD SUPER-E UL PREM REV MTG	1.000 ea
39PA1000	PACKAGING GROUP 39 PRINT	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 32188

Typical performance - not guaranteed values

Winding: 39WGW766-R006			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		48/24	Breakdown Torque		183 LB-FT		
R.P.M.		1765	Pull-up Torque		79 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		120 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		171 A
Service Factor (S.F.)		1.15		No-load Current		8.5 A	
NEMA Nom. Eff.		93	Power Factor	84	Line-line Res. @ 25°C		0.4083 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		70°C	
S.F. Amps				Temp. Rise @ S.F. Load		84°C	
				Locked-rotor Power Factor		32.6	
				Rotor inertia		2.27 LB-FT2	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	79	84	86	87	85
Efficiency	89.6	92.9	93.5	93.2	92.5	91.6	92.8
Speed	1791	1784	1776	1767	1758	1748	1762
Line amperes	10.17	13.79	18.39	23.89	28.78	34.6	26.82

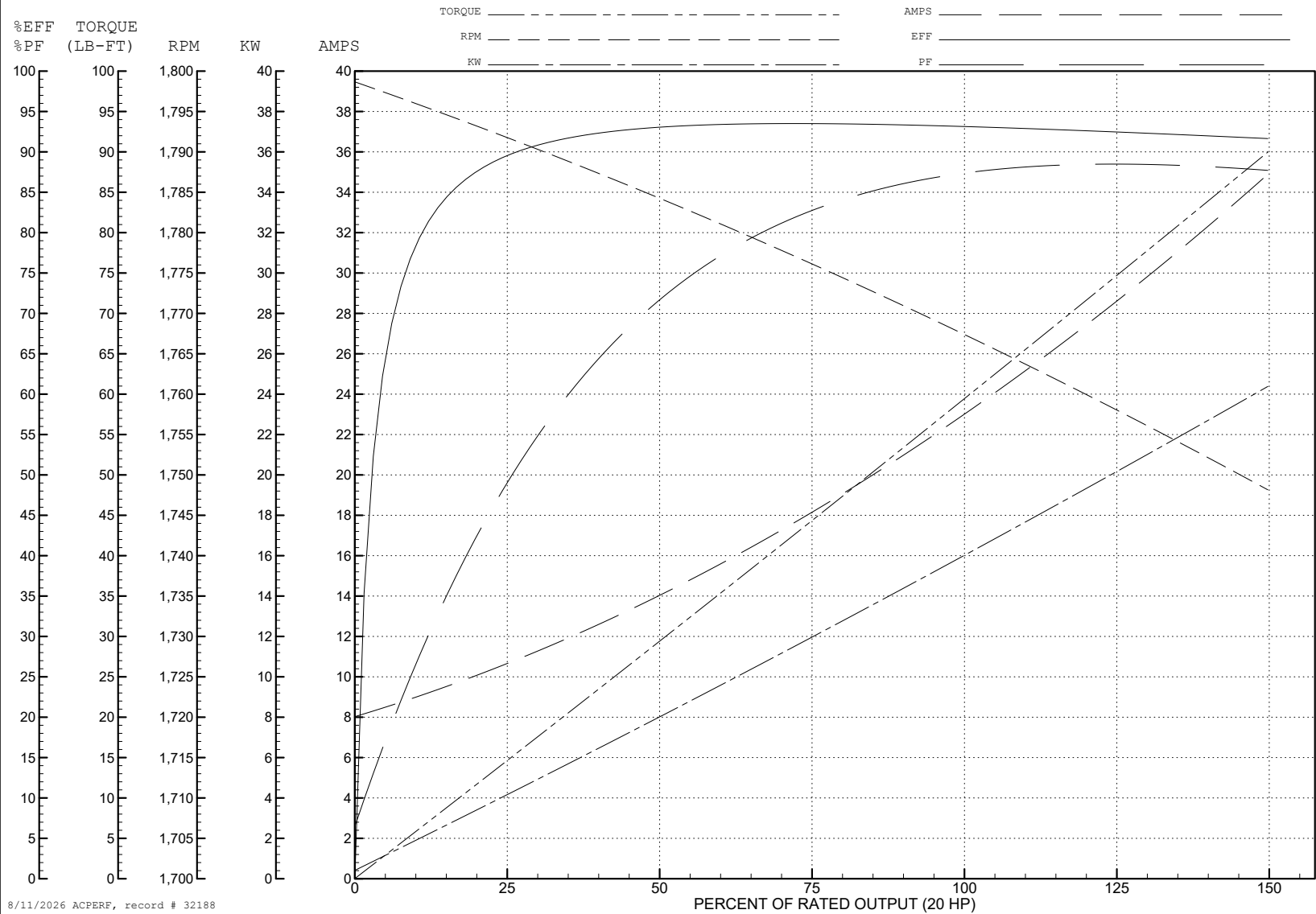
ABB Motors and Mechanical Inc.

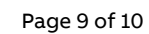
WINDING # 39GW766

Typical performance - not guaranteed values.

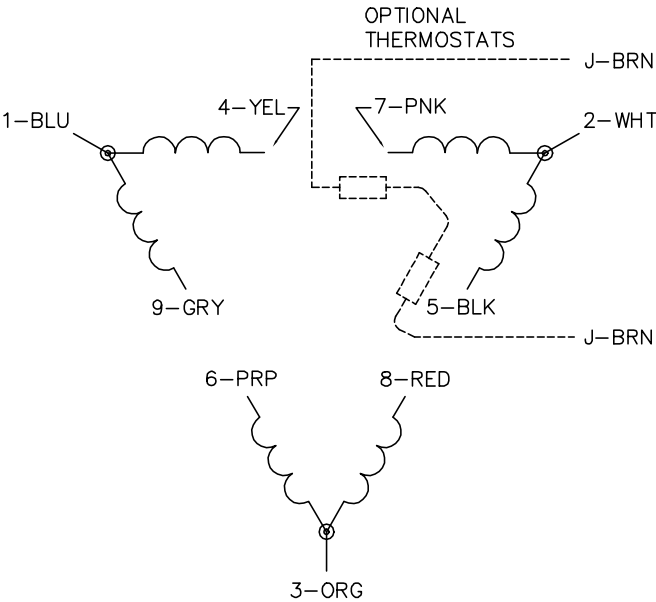
20 HP 3 PH 60 HZ 1765 RPM 460 V 3952M

TORQUES (LB-FT): PO=183 PU=79 LR=120 LRA=171

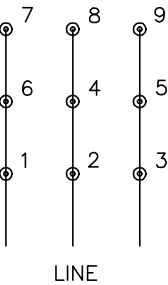




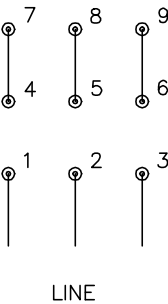
CD0180



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: —		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION
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