

ABB BALDOR RELIANCE III

Customer information packet

EHFM2535T

30HP, 1775RPM, 3PH, 60HZ, 286T, 4060M, OPSB, F2

Specifications

Enclosure	OPSB
Frame	286T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	30.000 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	UR CSA
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	36.000 A @ 460.0 V 72.000 A @ 230.0 V 76.000 A @ 208.0 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
High Voltage Full Load Amps	36.0 a
Insulation Class	F

Part Detail

Revision	P
Type	AC
Mech. spec.	40J100
Base	
Status	PRD/A
Elec. spec.	40WGX339
Layout	40LYJ100
Eff. date	09-15-2025
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	05-26-2016

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 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4060M
Mounting Arrangement	F2
Number of Poles	4
Overall Length	26.06 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	1.875 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

NP2094E06B03									
CAT.NO.	EHFM2535T								
SPEC.	40J100X339G1								
HP	30								
VOLTS	230/460								
AMPS	74/37								
RPM	1775								
FRAME	286T		HZ	60			PH	3	
SER.F.	1.15	CODE	H	DES	A		CL	F	
NEMA-NOM-EFF	94.1		PF	80					
RATING	40C AMB-CONT								
CC	010A		USABLE AT 208V					N/A	
DE	6311		ODE	6309					
AUTO		MANUAL				NONE			
ENCL	OPSB	SN							
BLANK									

Parts List

Part number	Description	Quantity
SA321310	SA 40J100X339G1	1.000 ea
RA309066	RA 40J100X339G1	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
40EP3200B31	PUEP OPEN 311 BRG W/SH GND MTG	1.000 ea
84XN0632J08	#6-32 X .50 SOCK HD, BK OX	2.000 ea
84XN0540J08	5-40 X 1/2" SHCS, BLACK OXIDE	3.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
HA3154A06	THRUBOLT STUD 3/8-16 X 19.500	4.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.070 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP2094E06B03	NP LABEL W/BARCODE (PREM EFF HVAC MTR)	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 56978

Typical performance - not guaranteed values

Winding: 40WGX339-R001				Type: 4060M		Enclosure: OPSB	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		30		Full Load Torque		88.8 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		72/36		Breakdown Torque		280 LB-FT	
R.P.M.		1775		Pull-up Torque		130 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		161 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		252 A	
Service Factor (S.F.)		1.15		No-load Current		15.4 A	
NEMA Nom. Eff.		94.1	Power Factor	Line-line Res. @ 25°C		0.22043 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		29°C	
S.F. Amps				Temp. Rise @ S.F. Load		35°C	
				Locked-rotor Power Factor		31.4	

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	67	77	82	85	85	84
Efficiency	90.5	93.8	94.4	94.3	93.9	93.2	94.1
Speed	1793.6	1788.1	1782.5	1776.9	1770.4	1763.1	1773
Line amperes	17.7	22.5	29	36.3	44.3	53	41.1

ABB Motors and Mechanical Inc.

WINDING # 40WGX339

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1775 RPM 460 V 4060M

TORQUES (LB-FT): PO=280 PU=130 LR=161 LRA=252





