

ABB BALDOR RELIANCE III

Customer information packet

FPM2538T-5

40HP, 3500RPM, 3PH, 60HZ, 286TS, 3954M, ODP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	286TS
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	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	UL 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	36.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
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
Inverter Code	Not Inverter

Part Detail

Revision	K
Type	AC
Mech. spec.	39R082
Base	
Status	PRD/A
Elec. spec.	39WGX991
Layout	39LYR082
Eff. date	11-14-2023
CD Diagram	CD0382
Poles	02
Leads	6#10
Proprietary	False
Created date	07-20-2016

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3954M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.56 IN
Power Factor	91
Product Family	Fire Pump Motor
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	3500 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3454L													
CAT.NO.	FPM2538T-5				CUST P/N					I.P.	23		
SPEC.	39R082X991H2				SER.NO.					FRAME	286TS		
HZ	60	HP	40		RPM	3500	HZ		HP		RPM		
VOLTS	575			CODE	G		VOLTS				CODE		
AMPS	36			DES	B		AMPS				DES		
EFF	91.7	SER.F.	1.15		PF	91		EFF		SER.F.		PF	
RATING	40C AMB-CONT				DE BRG	6311		GREASE	POLYREX EM				
BLANK					ODE BRG	6208		MTR. WT.	287				
					CLASS	F	PH	3					
					ENCL	ODP	CC	010A					
HTR-VOLTS		HTR-AMPS		HTR-WATTS									

AC Induction Motor Performance Data

Record # 58306

Typical performance - not guaranteed values

Winding: 39WGX991-R001				Type: 3954M		Enclosure: OPSB	
Nameplate Data				575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		40		Full Load Torque		60.6 LB-FT	
Volts		575		Start Configuration		direct on line	
Full Load Amps		36		Breakdown Torque		190 LB-FT	
R.P.M.		3500		Pull-up Torque		70.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		89.9 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		227 A
Service Factor (S.F.)		1.15		No-load Current		8.34 A	
NEMA Nom. Eff.		91.7	Power Factor	91	Line-line Res. @ 25°C		0.371 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		64°C	
S.F. Amps				Temp. Rise @ S.F. Load		81°C	
				Locked-rotor Power Factor		27.5	
				Rotor inertia		1.38 LB-FT2	

Load Characteristics 575 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	69	85	90	91	91	90	91
Efficiency	93	94	93.3	92	90.1	88.3	90.9
Speed	3580	3557	3532	3503	3470	3435	3483
Line amperes	12.2	19.1	27.2	36.2	46.2	56.7	42.2

ABB Motors and Mechanical Inc.

WINDING # 39WGX991

Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3500 RPM 575 V 3954M

TORQUES (LB-FT): PO=190 PU=70.8 LR=89.9 LRA=227



