

ABB BALDOR RELIANCE III

Customer information packet

FPM2538T

40//30HP, 3500//2910RPM, 3PH, 60//50HZ, 286T

Class -

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	286TS
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 50 HZ 40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ
Agency Approvals	CSA EEV UL
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	90.000 A @ 230.0 V 84.000 A @ 190.0 V 45.000 A @ 460.0 V 42.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	G
Type	AC
Mech. spec.	39L35
Base	
Status	PRD/A
Elec. spec.	39WGX928
Layout	39LYL035
Eff. date	11-14-2023
CD Diagram	CD0104
Poles	02
Leads	12#10
Proprietary	False
Created date	03-13-2017

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	42.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 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	2910 rpm 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				CUST P/N					I.P.		23		
SPEC.	39L035X928H2				SER.NO.					FRAME		286TS		
HZ	60	HP	40	RPM		3500		HZ	50	HP		30	RPM	2910
VOLTS	230/460			CODE	G		VOLTS		190/380			CODE	G	
AMPS	90/45			DES	B		AMPS		84/42			DES	B	
EFF	91.7	SER.F.	1.15	PF		91		EFF	91	SER.F.		1.15	PF 91	
RATING	40C AMB-CONT				DE BRG		6311			GREASE		POLYREX EM		
BLANK					ODE BRG		6208			MTR. WT.		282		
					CLASS	F		PH	3					
					ENCL	ODP		CC	010A					
HTR-VOLTS	HTR-AMPS		HTR-WATTS											

AC Induction Motor Performance Data

Record # 54883

Typical performance - not guaranteed values

Winding: 39WGX928-R001			Type: 3954M		Enclosure: OPSB	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		40//30		Full Load Torque		60.6 LB-FT
Volts		230/460//190/380		Start Configuration		direct on line
Full Load Amps		90/45//84/42		Breakdown Torque		191 LB-FT
R.P.M.		3500//2910		Pull-up Torque		71.3 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque		90.5 LB-FT
NEMA Design Code		B	KVA Code	Starting Current		285 A
Service Factor (S.F.)		1.15		No-load Current		10.5 A
NEMA Nom. Eff.		91.7	Power Factor	Line-line Res. @ 25°C		0.23 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C
S.F. Amps				Temp. Rise @ S.F. Load		79°C
				Locked-rotor Power Factor		27.2
				Rotor inertia		1.38 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	68	85	90	91	91	90	91
Efficiency	93.2	94	93.4	91.9	90.3	88.5	91
Speed	3580	3557	3532	3503	3471	3436	3484
Line amperes	15.3	23.9	34	45.3	57.7	70.7	52.7

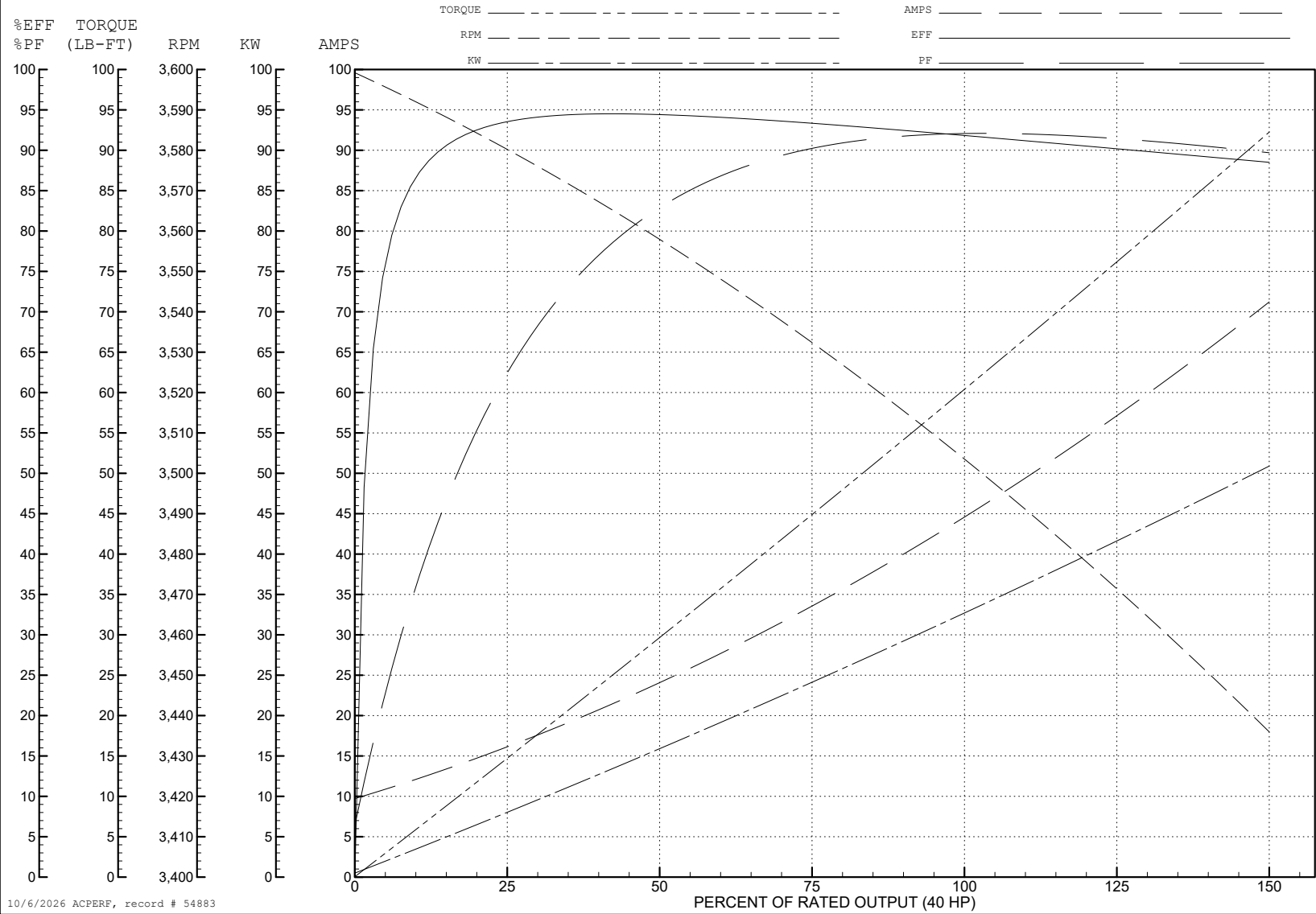
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WINDING # 39WGX928

Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3503 RPM 460 V 3954M

TORQUES (LB-FT): PO=191 PU=71.3 LR=90.5 LRA=285



AC Induction Motor Performance Data

Record # 54884

Typical performance - not guaranteed values

Winding: 39WGX928-R001		Type: 3954M	Enclosure: OPSB
Nameplate Data		380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	40//30	Full Load Torque	54.6 LB-FT
Volts	230/460//190/380	Start Configuration	direct on line
Full Load Amps	90/45//84/42	Breakdown Torque	184 LB-FT
R.P.M.	3500//2910	Pull-up Torque	75.2 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	95.4 LB-FT
NEMA Design Code	B KVA Code	Starting Current	278 A
Service Factor (S.F.)	1.15	No-load Current	10.2 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	0.23 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	55°C
S.F. Amps		Temp. Rise @ S.F. Load	70°C
		Locked-rotor Power Factor	30.6
		Rotor inertia	1.38 LB-FT ²

Load Characteristics 380 V, 50 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	66	84	89	91	91	91	91
Efficiency	93.5	94	93.1	91.6	89.9	87.9	90.6
Speed	2982	2961	2939	2913	2885	2855	2896
Line amperes	14.4	22	31.1	41.3	52.5	64.1	48

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WINDING # 39WGX928

Typical performance - not guaranteed values.

30 HP 3 PH 50 HZ 2913 RPM 380 V 3954M

TORQUES (LB-FT): PO=184 PU=75.2 LR=95.4 LRA=278

