

ABB BALDOR RELIANCE III

Customer information packet

FPM2535TS

30//25HP, 1770//1470RPM, 3PH, 60//50HZ, 286T

Specifications

Enclosure	ODP
Frame	286TS
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ 25.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	CSA EEV UL 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	72.000 A @ 230.0 V 72.000 A @ 190.0 V 36.000 A @ 460.0 V 36.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %

Part Detail

Revision	K
Type	AC
Mech. spec.	40G49
Base	
Status	PRD/A
Elec. spec.	40WGX324
Layout	40LYG049
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	04
Leads	12#10
Proprietary	False
Created date	11-30-2015

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
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	4052M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.69 IN
Power Factor	84
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	1470 rpm 1770 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.	FPM2535TS				CUST P/N				I.P.				23			
SPEC.	40G049X324H2				SER.NO.				FRAME				286TS			
HZ	60	HP	30		RPM	1770		HZ	50		HP	25		RPM	1470	
VOLTS	230/460				CODE	G		VOLTS	190/380				CODE	F		
AMPS	72/36				DES	B		AMPS	72/36				DES	B		
EFF	92.4	SER.F.		1.15		PF	84		EFF	92.4		SER.F.	1.15		PF	84
RATING	40C AMB-CONT					DE BRG		6311			GREASE		POLYREX EM			
BLANK						ODE BRG		6309			MTR. WT.		334			
						CLASS	F			PH	3					
						ENCL	ODP			CC	010A					
HTR-VOLTS			HTR-AMPS				HTR-WATTS									

AC Induction Motor Performance Data

Record # 54887

Typical performance - not guaranteed values

Winding: 40WGX324-R001			Type: 4052M		Enclosure: OPEN			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		30//25		Full Load Torque		89.5 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		72/36		Breakdown Torque		258 LB-FT		
R.P.M.		1770//1470		Pull-up Torque		113 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		143 LB-FT	
NEMA Design Code		B		KVA Code	G	Starting Current		211 A
Service Factor (S.F.)		1.15		No-load Current		13 A		
NEMA Nom. Eff.		92.4	Power Factor		84	Line-line Res. @ 25°C		0.26526 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		32°C		
S.F. Amps				Temp. Rise @ S.F. Load		40°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	51	72	80	84	85	85	85
Efficiency	90.4	93.4	93.9	93.6	92.8	91.9	93.1
Speed	1792.8	1786.6	1780	1773.1	1765.1	1756.4	1768
Line amperes	15.6	20.9	27.9	35.9	44.5	53.9	41.1

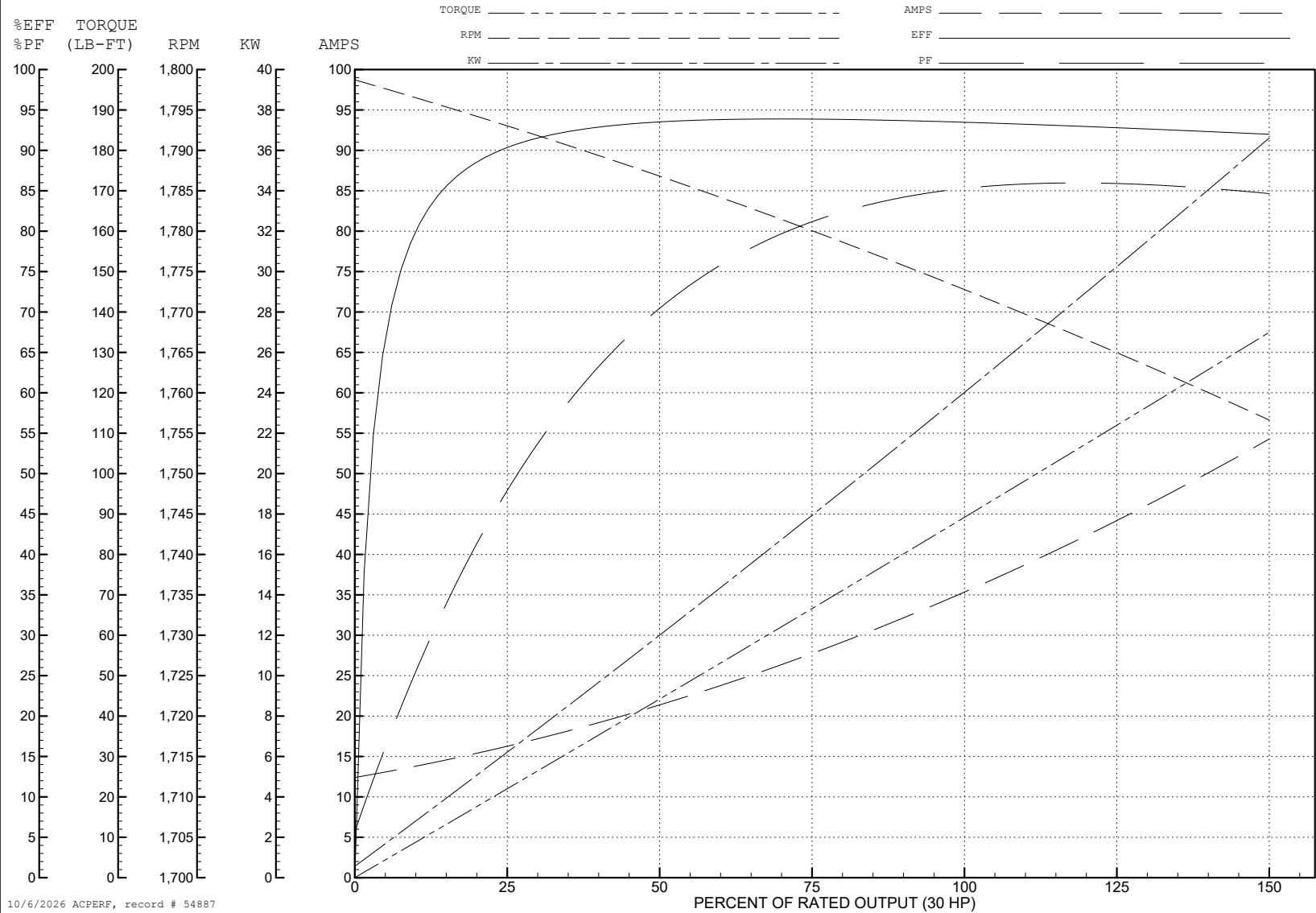
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WINDING # 40WGX324

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1773.1 RPM 460 V 4052M

TORQUES (LB-FT): PO=258 PU=113 LR=143 LRA=211



AC Induction Motor Performance Data

Record # 54888

Typical performance - not guaranteed values

Winding: 40WGX324-R001			Type: 4052M		Enclosure: OPEN		
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		30//25		Full Load Torque		89.8 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		72/36		Breakdown Torque		250 LB-FT	
R.P.M.		1770//1470		Pull-up Torque		116 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		147 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		201 A
Service Factor (S.F.)		1.15		No-load Current		12.7 A	
NEMA Nom. Eff.		92.4	Power Factor	84	Line-line Res. @ 25°C		0.261 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		33°C	
S.F. Amps				Temp. Rise @ S.F. Load		41°C	
				Locked-rotor Power Factor		34.8	
				Rotor inertia		4.14 LB-FT2	

Load Characteristics 380 V, 50 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	73	81	85	86	85	86
Efficiency	89.8	92.7	93.1	92.7	92.2	90.7	92.4
Speed	1493	1487	1480	1472	1464	1455	1467
Line amperes	15.4	20.8	28	36.3	45.2	55.2	41.6

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WINDING # 40WGx324

Typical performance - not guaranteed values.

25 HP 3 PH 50 HZ 1472 RPM 380 V 4052M

TORQUES (LB-FT): PO=250 PU=116 LR=147 LRA=201

