

ABB BALDOR RELIANCE III

Customer information packet

FPM2551TS

75//60HP, 1770//1470RPM, 3PH, 60//50HZ, 365T

Specifications

Enclosure	OPSB
Frame	365TS
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ 60.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 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	87.000 A @ 460.0 V 84.000 A @ 380.0 V 174.000 A @ 230.0 V 168.000 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	C
Type	AC
Mech. spec.	42E360
Base	
Status	PRD/A
Elec. spec.	42WGW977
Layout	42LYE360
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	03-20-2017

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	84.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	29.94 IN
Power Factor	86
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	1.875 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.	FPM2551TS				CUST P/N					I.P.	23		
SPEC.	42E360W977H2				SER.NO.					FRAME	365TS		
HZ	60	HP	75		RPM	1770		HZ	50		HP	60	
												RPM	1470
VOLTS	230/460				CODE	F				VOLTS	190/380		
												CODE	F
AMPS	174/87				DES	B				AMPS	168/84		
												DES	B
EFF	94.1	SER.F.	1.15		PF	86		EFF	93.6		SER.F.	1.15	
												PF	86
RATING	40C AMB-CONT				DE BRG	6313				GREASE	POLYREX EM		
BLANK					ODE BRG	6311				MTR. WT.	570		
					CLASS	F		PH	3				
					ENCL	OPSB		CC	010A				
HTR-VOLTS		HTR-AMPS		HTR-WATTS									

AC Induction Motor Performance Data

Record # 54269

Typical performance - not guaranteed values

Winding: 42WGW977-R001		Type: 4272M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	75//60	Full Load Torque	222 LB-FT
Volts	230/460//190/380	Start Configuration	direct on line
Full Load Amps	174/87//168/84	Breakdown Torque	585 LB-FT
R.P.M.	1770//1470	Pull-up Torque	301 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	348 LB-FT
NEMA Design Code	B KVA Code	Starting Current	502 A
Service Factor (S.F.)	1.15	No-load Current	27.1 A
NEMA Nom. Eff.	94.1 Power Factor	Line-line Res. @ 25°C	0.37298 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	60°C
S.F. Amps		Temp. Rise @ S.F. Load	77°C

Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	76	83	86	86	86	86
Efficiency	93	94.9	94.9	94.3	93.3	92.1	93.7
Speed	1794.3	1787.6	1780.4	1772.3	1763.3	1752.3	1767
Line amperes	33.9	48.4	66.4	86.5	109	134	100

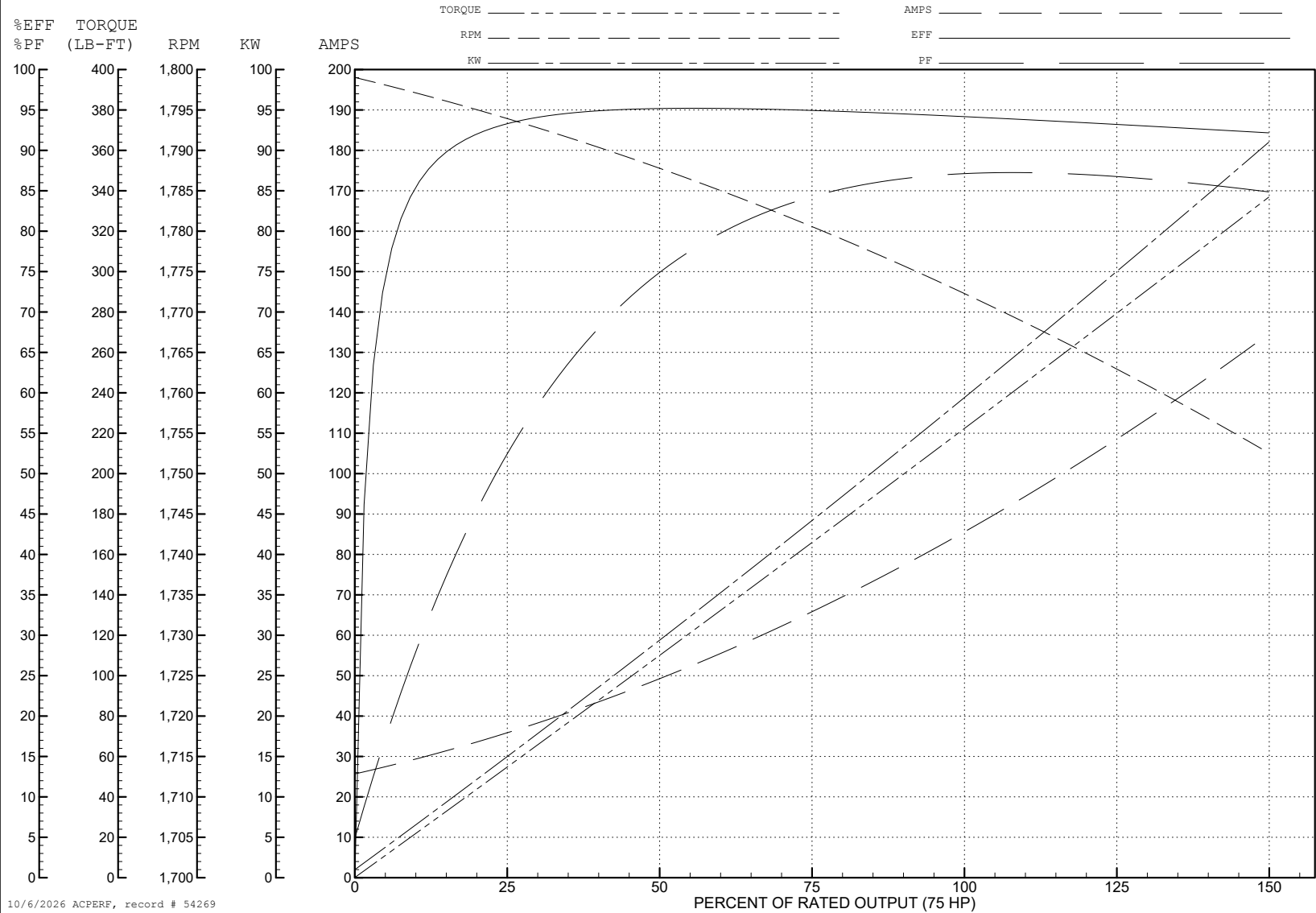
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WINDING # 42WGW977

Typical performance - not guaranteed values.

75 HP 3 PH 60 HZ 1772.3 RPM 460 V 4272M

TORQUES (LB-FT): PO=585 PU=301 LR=348 LRA=502



AC Induction Motor Performance Data

Record # 54270

Typical performance - not guaranteed values

Winding: 42WGW977-R001			Type: 4272M		Enclosure: OPSB		
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		75//60		Full Load Torque		214 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		174/87//168/84		Breakdown Torque		567 LB-FT	
R.P.M.		1770//1470		Pull-up Torque		316 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		366 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		492 A
Service Factor (S.F.)		1.15		No-load Current		26.5 A	
NEMA Nom. Eff.		94.1	Power Factor	86	Line-line Res. @ 25°C		0.0893 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		58°C	
S.F. Amps				Temp. Rise @ S.F. Load		73°C	
				Locked-rotor Power Factor		29.4	
				Rotor inertia		9.59 LB-FT2	

Load Characteristics 380 V, 50 Hz, 60 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	76	83	86	87	85	87
Efficiency	92.4	94.5	94.4	93.8	92.9	91.2	93.3
Speed	1494	1488	1481	1473	1465	1454	1468
Line amperes	33.1	47.1	64.6	84.2	106	131	97.3

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WINDING # 42WGW977

Typical performance - not guaranteed values.

60 HP 3 PH 50 HZ 1473 RPM 380 V 4272M

TORQUES (LB-FT): PO=567 PU=316 LR=366 LRA=492

