

ABB BALDOR RELIANCE III

Customer information packet FPM2549T

75//60HP, 3535//2940RPM, 3PH, 60//50HZ, 364T

Specifications

Enclosure	OPSB
Frame	364TS
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	3000 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	84.000 A @ 460.0 V 82.000 A @ 380.0 V 168.000 A @ 230.0 V 164.000 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
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.	42WGW976
Layout	42LYE360
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	02
Leads	12#6
Proprietary	False
Created date	03-20-2017

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	82.0 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 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4250M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.94 IN
Power Factor	90
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	2940 rpm 3535 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.	FPM2549T				CUST P/N								I.P.	23		
SPEC.	42E360W976H2				SER.NO.								FRAME	364TS		
HZ	60	HP	75		RPM	3535		HZ	50		HP	60		RPM	2940	
VOLTS	230/460				CODE	F		VOLTS	190/380				CODE	F		
AMPS	168/84				DES	B		AMPS	164/82				DES	B		
EFF	93	SER.F.		1.15		PF	90		EFF	93		SER.F.	1.15		PF	90
RATING	40C AMB-CONT					DE BRG		6313			GREASE		POLYREX EM			
BLANK						ODE BRG		6311			MTR. WT.		485			
						CLASS		F			PH		3			
						ENCL		OPSB			CC		010A			
HTR-VOLTS			HTR-AMPS				HTR-WATTS									

AC Induction Motor Performance Data

Record # 54693

Typical performance - not guaranteed values

Winding: 42WGW976-R001			Type: 4250M		Enclosure: OPSB			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		75//60		Full Load Torque		112 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		168/84//164/82		Breakdown Torque		381 LB-FT		
R.P.M.		3535//2940		Pull-up Torque		111 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		148 LB-FT	
NEMA Design Code		B		KVA Code	F	Starting Current		509 A
Service Factor (S.F.)		1.15		No-load Current		19.8 A		
NEMA Nom. Eff.		93	Power Factor		90	Line-line Res. @ 25°C		0.092782 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C		
S.F. Amps				Temp. Rise @ S.F. Load		52°C		
				Locked-rotor Power Factor		21.3		

Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	67	84	89	90	90	89	90
Efficiency	92.4	94.5	94.5	93.8	92.8	91.5	93.2
Speed	3584.7	3571.7	3556.4	3538.6	3518	3495.6	3526
Line amperes	28.3	44.4	63	83.9	106	130	97.2

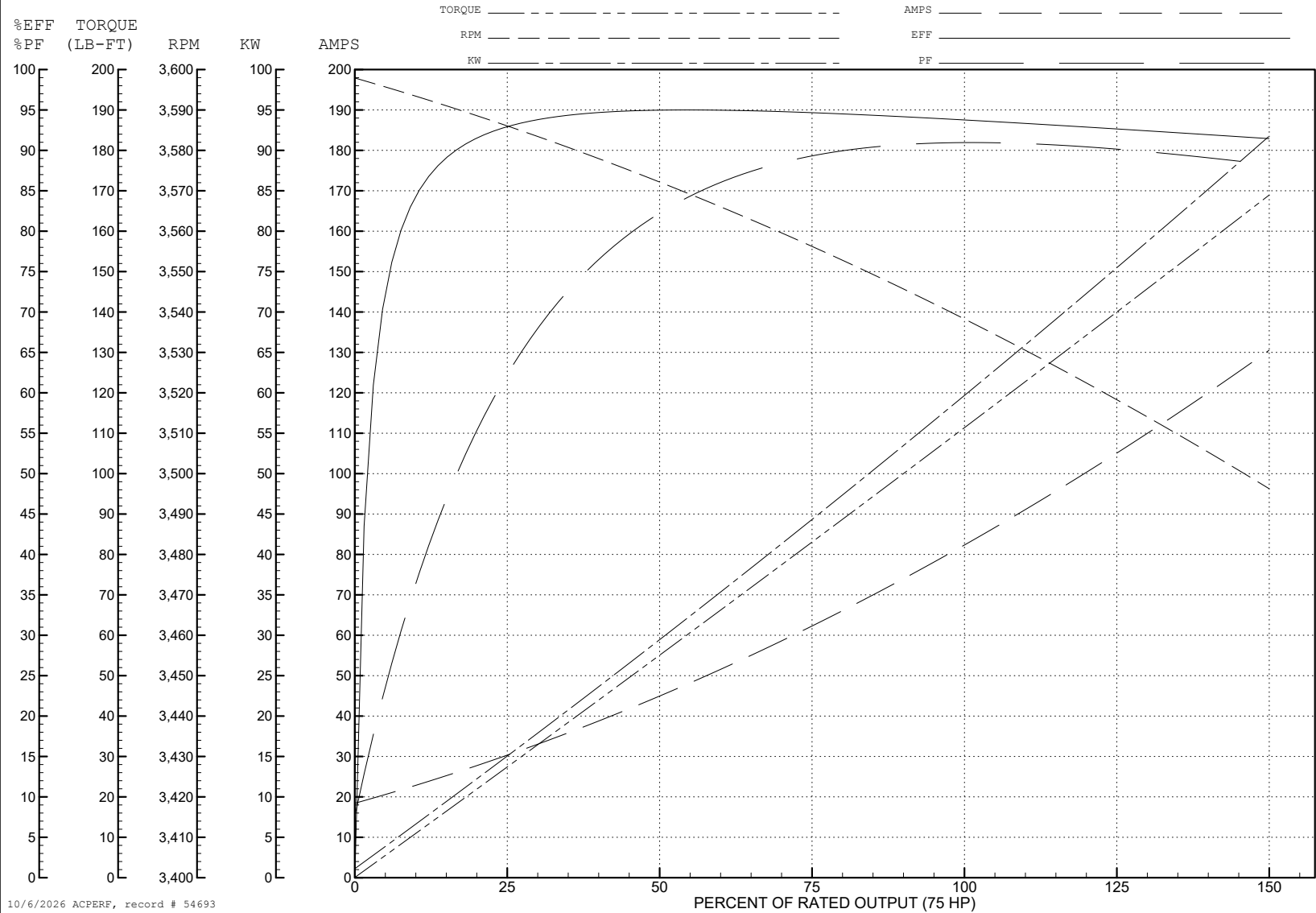
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WINDING # 42WGW976

Typical performance - not guaranteed values.

75 HP 3 PH 60 HZ 3538.6 RPM 460 V 4250M

TORQUES (LB-FT): PO=381 PU=111 LR=148 LRA=509



AC Induction Motor Performance Data

Record # 54695

Typical performance - not guaranteed values

Winding: 42WGW976-R001			Type: 4250M		Enclosure: OPSB		
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		75//60		Full Load Torque		108 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		168/84//164/82		Breakdown Torque		368 LB-FT	
R.P.M.		3535//2940		Pull-up Torque		118 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		157 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		498 A
Service Factor (S.F.)		1.15		No-load Current		19.2 A	
NEMA Nom. Eff.		93	Power Factor	90	Line-line Res. @ 25°C		0.0928 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		40°C	
S.F. Amps				Temp. Rise @ S.F. Load		50°C	
				Locked-rotor Power Factor		24	
				Rotor inertia		3.91 LB-FT2	

Load Characteristics 380 V, 50 Hz, 60 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	68	84	89	90	90	89	90
Efficiency	90.6	93.4	93.6	93.3	92.1	90.2	92.6
Speed	2985	2973	2958	2941	2922	2901	2930
Line amperes	27.6	43.3	61.5	81.8	103	127	94.5

ABB Motors and Mechanical Inc.

WINDING # 42GW976

Typical performance - not guaranteed values.

60 HP 3 PH 50 HZ 2941 RPM 380 V 4250M

TORQUES (LB-FT): PO=368 PU=118 LR=157 LRA=498

