

ABB BALDOR RELIANCE III

Customer information packet

FPM2559TS-4

125//100HP, 1775//1475RPM, 3PH, 60//50HZ, 40

Specifications

Enclosure	OPSB
Frame	405TS
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 50 HZ 125.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	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	145.000 A @ 460.0 V 141.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
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	141.0 a

Part Detail

Revision	P
Type	AC
Mech. spec.	44E020
Base	
Status	PRD/A
Elec. spec.	44WGW359
Layout	44LYE020
Eff. date	03-11-2026
CD Diagram	CD1480
Poles	04
Leads	12#2
Proprietary	False
Created date	09-17-2015

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 @ 2 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4476M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.60 IN
Power Factor	85
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	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1475 rpm 1775 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.	FPM2559TS-4				CUST P/N					I.P.	23		
SPEC.	44E020W359H2				SER.NO.					FRAME	405TS		
HZ	60	HP	125		RPM	1775		HZ	50		HP	100	
												RPM	1475
VOLTS	460			CODE	F			VOLTS	380			CODE	F
AMPS	145			DES	B			AMPS	141			DES	B
EFF	94.5	SER.F.	1.15		PF	85		EFF	94.1		SER.F.	1.15	PF 85
RATING	40C AMB-CONT				DE BRG	6313				GREASE	POLYREX EM		
BLANK					ODE BRG	6312				MTR. WT.	595		
					CLASS	F		PH	3				
					ENCL	OPSB		CC	010A				
HTR-VOLTS		HTR-AMPS		HTR-WATTS									

AC Induction Motor Performance Data

Record # 52882

Typical performance - not guaranteed values

Winding: 44WGW359-R001				Type: 4476M		Enclosure: OPSB	
Nameplate Data				460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		125//100		Full Load Torque		369 LB-FT	
Volts		460//380		Start Configuration		direct on line	
Full Load Amps		145//141		Breakdown Torque		991 LB-FT	
R.P.M.		1775//1475		Pull-up Torque		385 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		490 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		845 A
Service Factor (S.F.)		1.15		No-load Current		42.8 A	
NEMA Nom. Eff.		94.5	Power Factor	85	Line-line Res. @ 25°C		0.0453 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		48°C	
S.F. Amps				Temp. Rise @ S.F. Load		58°C	
				Locked-rotor Power Factor		24.7	
				Rotor inertia		14.4 LB-FT2	

Load Characteristics 460 V, 60 Hz, 125 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	77	83	85	85	84	85
Efficiency	92.6	95.2	95.1	94.6	93.9	93	94.2
Speed	1795	1790	1784	1777	1769	1761	1772
Line amperes	55.1	80.2	111	145	182	223	167

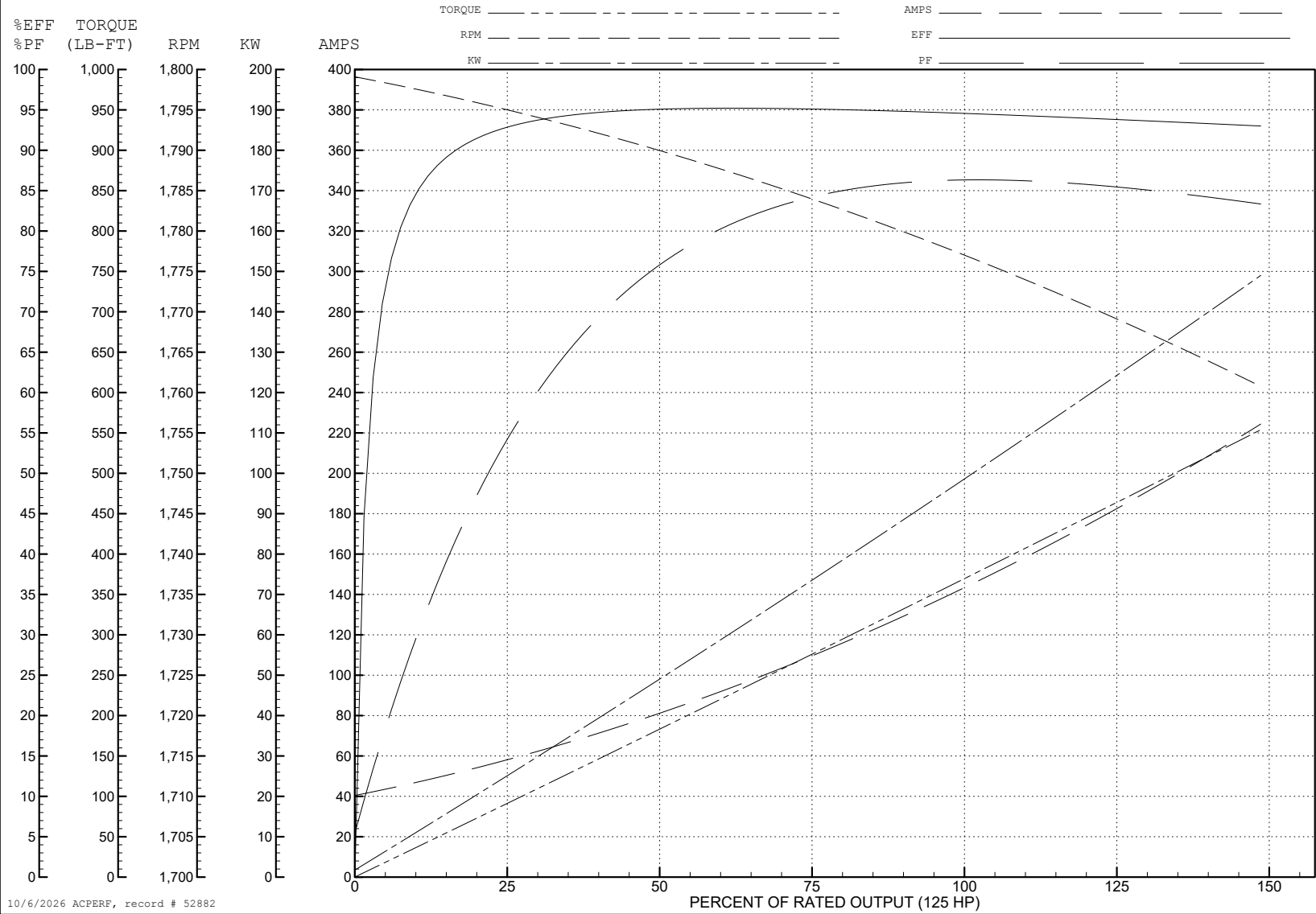
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WINDING # 44WG359

Typical performance - not guaranteed values.

125 HP 3 PH 60 HZ 1777 RPM 460 V 4476M

TORQUES (LB-FT): PO=991 PU=385 LR=490 LRA=845



AC Induction Motor Performance Data

Record # 52883

Typical performance - not guaranteed values

Winding: 44WGW359-R001				Type: 4476M		Enclosure: OPSB	
Nameplate Data				380 V, 50 Hz: Single Voltage Motor			
Rated Output (HP)		125//100		Full Load Torque		355 LB-FT	
Volts		460//380		Start Configuration		direct on line	
Full Load Amps		145//141		Breakdown Torque		962 LB-FT	
R.P.M.		1775//1475		Pull-up Torque		406 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		517 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		829 A
Service Factor (S.F.)		1.15		No-load Current		42 A	
NEMA Nom. Eff.		94.5	Power Factor	85	Line-line Res. @ 25°C		0.0453 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		45°C	
S.F. Amps				Temp. Rise @ S.F. Load		55°C	
				Locked-rotor Power Factor		27.4	
				Rotor inertia		14.4 LB-FT2	

Load Characteristics 380 V, 50 Hz, 100 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	77	84	85	85	84	85
Efficiency	92.9	94.7	94.9	94.3	93.5	92.4	93.9
Speed	1495	1490	1485	1478	1470	1463	1473
Line amperes	53.7	77.9	107	141	177	217	163

ABB Motors and Mechanical Inc.

WINDING # 44GW359

Typical performance - not guaranteed values.

100 HP 3 PH 50 HZ 1478 RPM 380 V 4476M

TORQUES (LB-FT): PO=962 PU=406 LR=517 LRA=829

