

ABB BALDOR RELIANCE III

Customer information packet

VJPFPM2559T-4

76M 4P OPSB VER 405TCZ DRIPCOVER

Specifications

Enclosure	OPSB
Frame	405TCZ
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	460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	CSA EEV UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	141.000 A @ 380.0 V 145.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	141.0 a
Insulation Class	F

Part Detail

Revision	D
Type	AC
Mech. spec.	44E270
Base	
Status	PRD/A
Elec. spec.	44WGW359
Layout	44LYE270
Eff. date	08-01-2023
CD Diagram	CD1480
Poles	04
Leads	12#2
Proprietary	False
Created date	07-06-2018

Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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	38.47 IN
Power Factor	85
Product Family	Fire Pump Motor
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	Included
Service Factor	1.15
Shaft Diameter	1.625 IN
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 - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3454L													
CAT.NO.	VJPFPM2559T-4				CUST P/N					I.P.	23		
SPEC.	44E270W359H2				SER.NO.					FRAME	405TCZ		
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	6316				GREASE	POLYREX EM		
BLANK					ODE BRG	6312				MTR. WT.	590		
					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

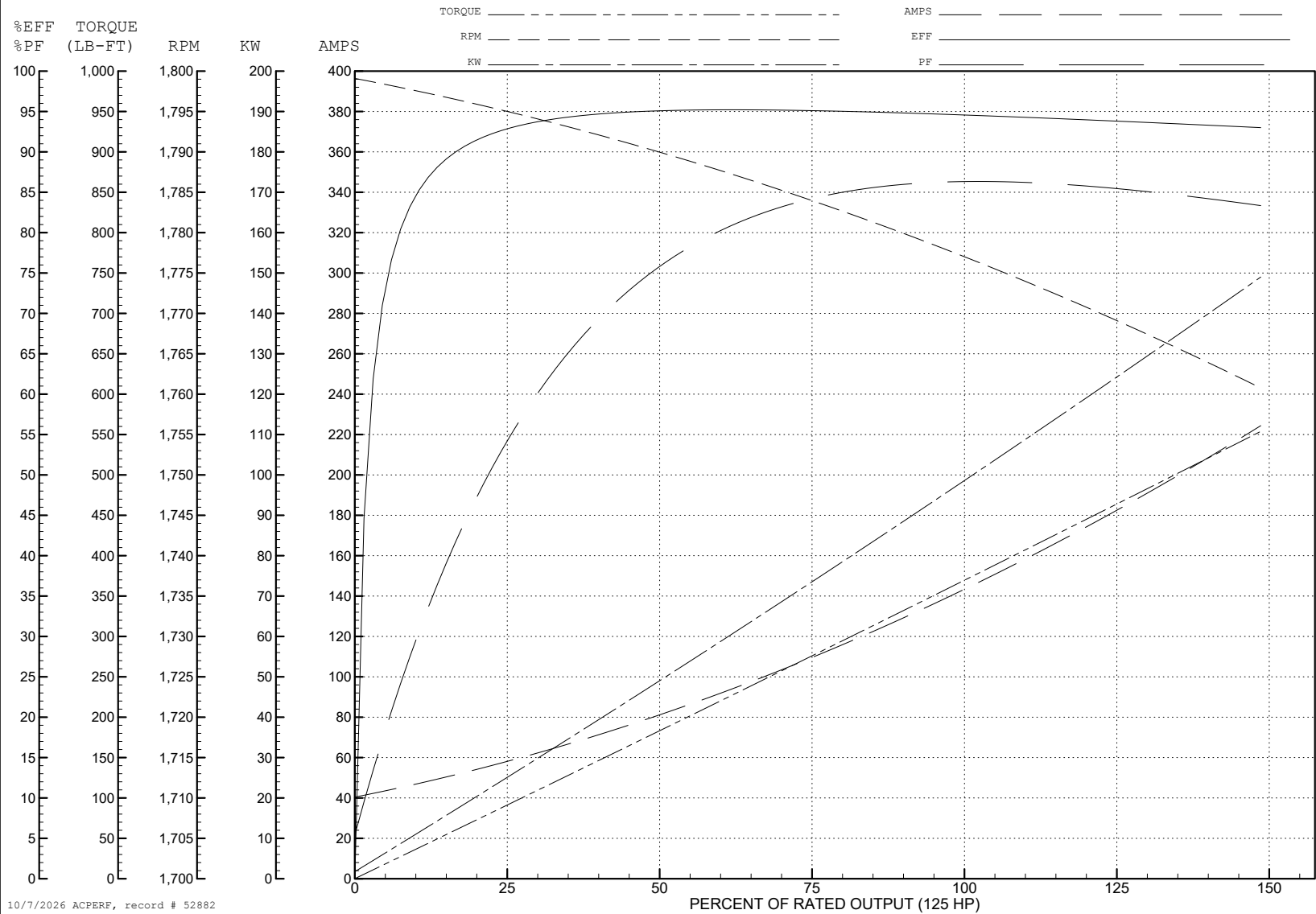
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WINDING # 44WG359

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 # 44WG359

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

