

ABB BALDOR RELIANCE III

Customer information packet

VJPFPM2554T-4

56M 2P OPSB VER 404TCZ DRIPCOVER

Specifications

Enclosure	OPSB
Frame	404TCZ
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	3000 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	135.000 A @ 380.0 V 138.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	135.0 a
Insulation Class	F

Part Detail

Revision	D
Type	AC
Mech. spec.	44E270
Base	
Status	PRD/A
Elec. spec.	44WGW358
Layout	44LYE270
Eff. date	08-01-2023
CD Diagram	CD1480
Poles	02
Leads	12#6
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 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4456M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	38.47 IN
Power Factor	90
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	2940 rpm 3540 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.	VJPFPM2554T-4				CUST P/N					I.P.		23			
SPEC.	44E270W358H3				SER.NO.					FRAME		404TCZ			
HZ	60	HP	125		RPM	3540		HZ	50		HP	100		RPM	2940
VOLTS	460				CODE	F		VOLTS	380				CODE	G	
AMPS	138				DES	B		AMPS	135				DES	B	
EFF	93.6	SER.F.	1.15		PF	90		EFF	93		SER.F.	1.15		PF	90
RATING	40C AMB-CONT				DE BRG		6316			GREASE		POLYREX EM			
BLANK					ODE BRG		6312			MTR. WT.		790			
					CLASS	F		PH	3						
					ENCL	OPSB		CC	010A						
HTR-VOLTS			HTR-AMPS		HTR-WATTS										

AC Induction Motor Performance Data

Record # 52872

Typical performance - not guaranteed values

Winding: 44WGW358-R001				Type: 4454M		Enclosure: OPSB	
Nameplate Data				460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		125//100		Full Load Torque		185 LB-FT	
Volts		460//380		Start Configuration		direct on line	
Full Load Amps		138//135		Breakdown Torque		594 LB-FT	
R.P.M.		3540//2940		Pull-up Torque		209 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		266 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		906 A
Service Factor (S.F.)		1.15		No-load Current		32.1 A	
NEMA Nom. Eff.		93.6	Power Factor	90	Line-line Res. @ 25°C		0.0694 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		53°C	
S.F. Amps				Temp. Rise @ S.F. Load		65°C	
				Locked-rotor Power Factor		24.4	
				Rotor inertia		7.32 LB-FT2	

Load Characteristics 460 V, 60 Hz, 125 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	68	85	89	91	90	89	90
Efficiency	90.3	93.5	94.1	93.6	93.4	92.1	93.5
Speed	3588	3575	3562	3548	3533	3516	3539
Line amperes	48.1	74.2	105	138	173	212	159

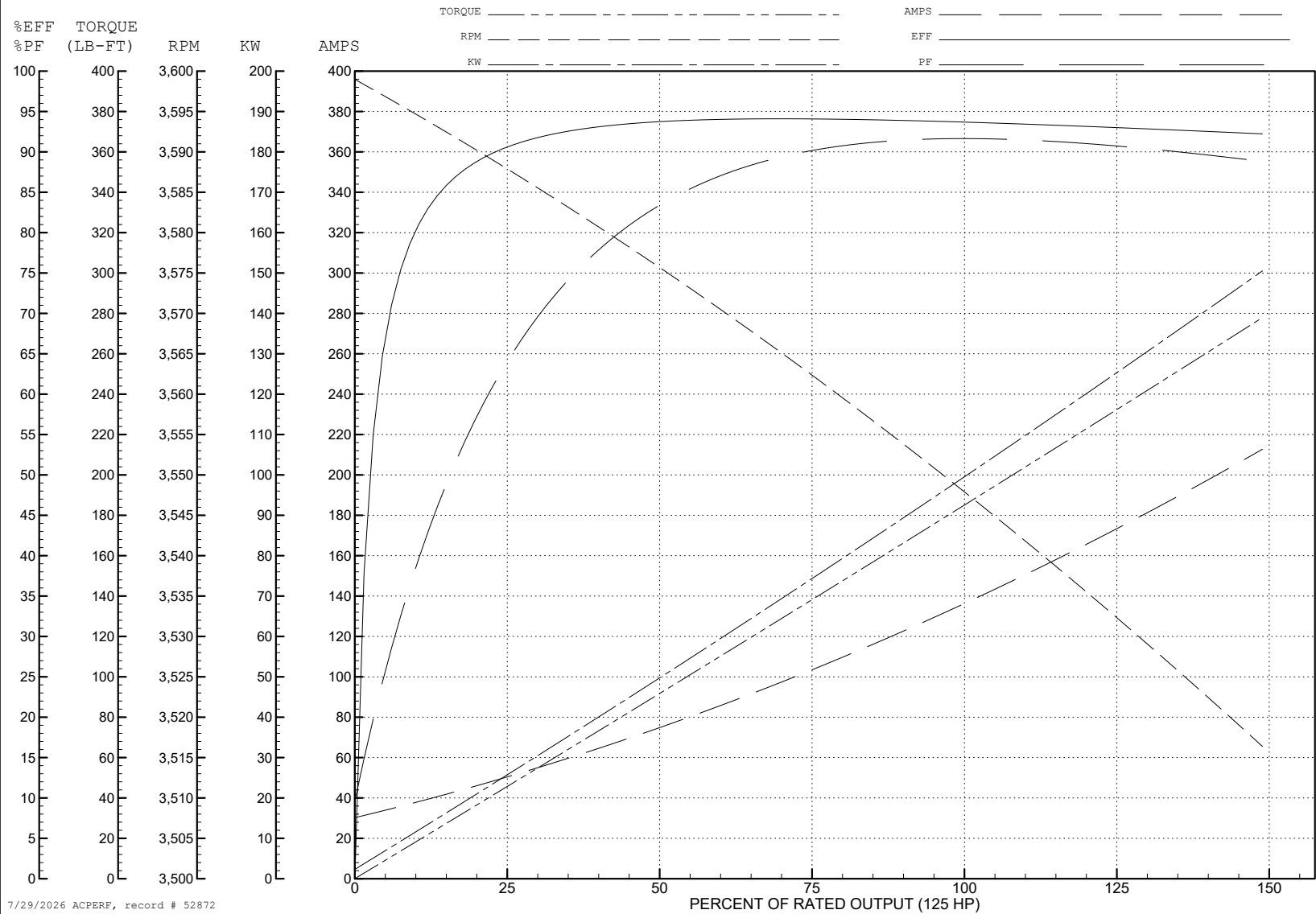
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WINDING # 44WG358

Typical performance - not guaranteed values.

125 HP 3 PH 60 HZ 3548 RPM 460 V 4454M

TORQUES (LB-FT): PO=594 PU=209 LR=266 LRA=906



AC Induction Motor Performance Data

Record # 52873

Typical performance - not guaranteed values

Winding: 44WGW358-R001				Type: 4456M		Enclosure: OPSB	
Nameplate Data				380 V, 50 Hz: Single Voltage Motor			
Rated Output (HP)		125//100		Full Load Torque		178 LB-FT	
Volts		460//380		Start Configuration		direct on line	
Full Load Amps		138//135		Breakdown Torque		572 LB-FT	
R.P.M.		3540//2940		Pull-up Torque		220 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		281 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		883 A
Service Factor (S.F.)		1.15		No-load Current		31.5 A	
NEMA Nom. Eff.		93.6	Power Factor	90	Line-line Res. @ 25°C		0.0694 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		50°C	
S.F. Amps				Temp. Rise @ S.F. Load		63°C	
				Locked-rotor Power Factor		27.6	
				Rotor inertia		7.32 LB-FT2	

Load Characteristics 380 V, 50 Hz, 100 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	68	85	89	91	91	90	91
Efficiency	91.1	93.7	93.8	93.3	92.9	91.5	93.1
Speed	2989	2976	2964	2951	2937	2920	2943
Line amperes	46.6	71.8	102	134	168	206	154

ABB Motors and Mechanical Inc.

WINDING # 44WG358

Typical performance - not guaranteed values.

100 HP 3 PH 50 HZ 2951 RPM 380 V 4456M

TORQUES (LB-FT): PO=572 PU=220 LR=281 LRA=883

