

ABB BALDOR RELIANCE III

Customer information packet

VJPFPM2514T

20//15HP, 3450//2860RPM, 3PH, 60//50HZ, 254J

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	254JP
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ 15.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL CSA EEV
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	21.000 A @ 380.0 V 23.000 A @ 460.0 V 42.000 A @ 190.0 V 46.000 A @ 230.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %

Part Detail

Revision	P
Type	AC
Mech. spec.	37N805
Base	
Status	PRD/A
Elec. spec.	37WGR893
Layout	37LYN805
Eff. date	06-08-2023
CD Diagram	CD0104
Poles	02
Leads	12#12
Proprietary	False
Created date	12-21-2015

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	21.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3742M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.66 IN
Power Factor	90
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.250 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	2860 rpm 3450 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.	VJPFPM2514T				CUST P/N				I.P.				23		
SPEC.	37N805R893H1				SER.NO.				FRAME				254JP		
HZ	60	HP	20		RPM	3450		HZ	50		HP	15		RPM	2860
VOLTS	230/460				CODE	G		VOLTS	190/380				CODE	G	
AMPS	46/23				DES	B		AMPS	42/21				DES	B	
EFF	90.2	SER.F.	1.15		PF	90		EFF	89.5		SER.F.	1.15		PF	90
RATING	40C AMB-CONT				DE BRG	6309				GREASE	POLYREX EM				
BLANK					ODE BRG	6206				MTR. WT.	145				
					CLASS	F		PH	3						
					ENCL	OPSB		CC	010A						
HTR-VOLTS	N/A	HTR-AMPS	N/A	HTR-WATTS		N/A									

AC Induction Motor Performance Data

Record # 54579

Typical performance - not guaranteed values

Winding: 37WGR893-R001		Type: 3742M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20//15	Full Load Torque	30.3 LB-FT
Volts	230/460//190/380	Start Configuration	direct on line
Full Load Amps	46/23//42/21	Breakdown Torque	89.4 LB-FT
R.P.M.	3450//2860	Pull-up Torque	45.9 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	51.7 LB-FT
NEMA Design Code	B KVA Code	Starting Current	137 A
Service Factor (S.F.)	1.15	No-load Current	5.92 A
NEMA Nom. Eff.	90.2 Power Factor	Line-line Res. @ 25°C	0.53993 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	67°C
S.F. Amps		Temp. Rise @ S.F. Load	89°C

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	65	83	88	90	91	90	91
Efficiency	91.9	93	92	90.4	88.2	85.7	89.1
Speed	3565	3528.9	3490.7	3447.9	3395.3	3337.8	3416
Line amperes	8.05	12.3	17.3	22.9	29.3	36.4	26.7

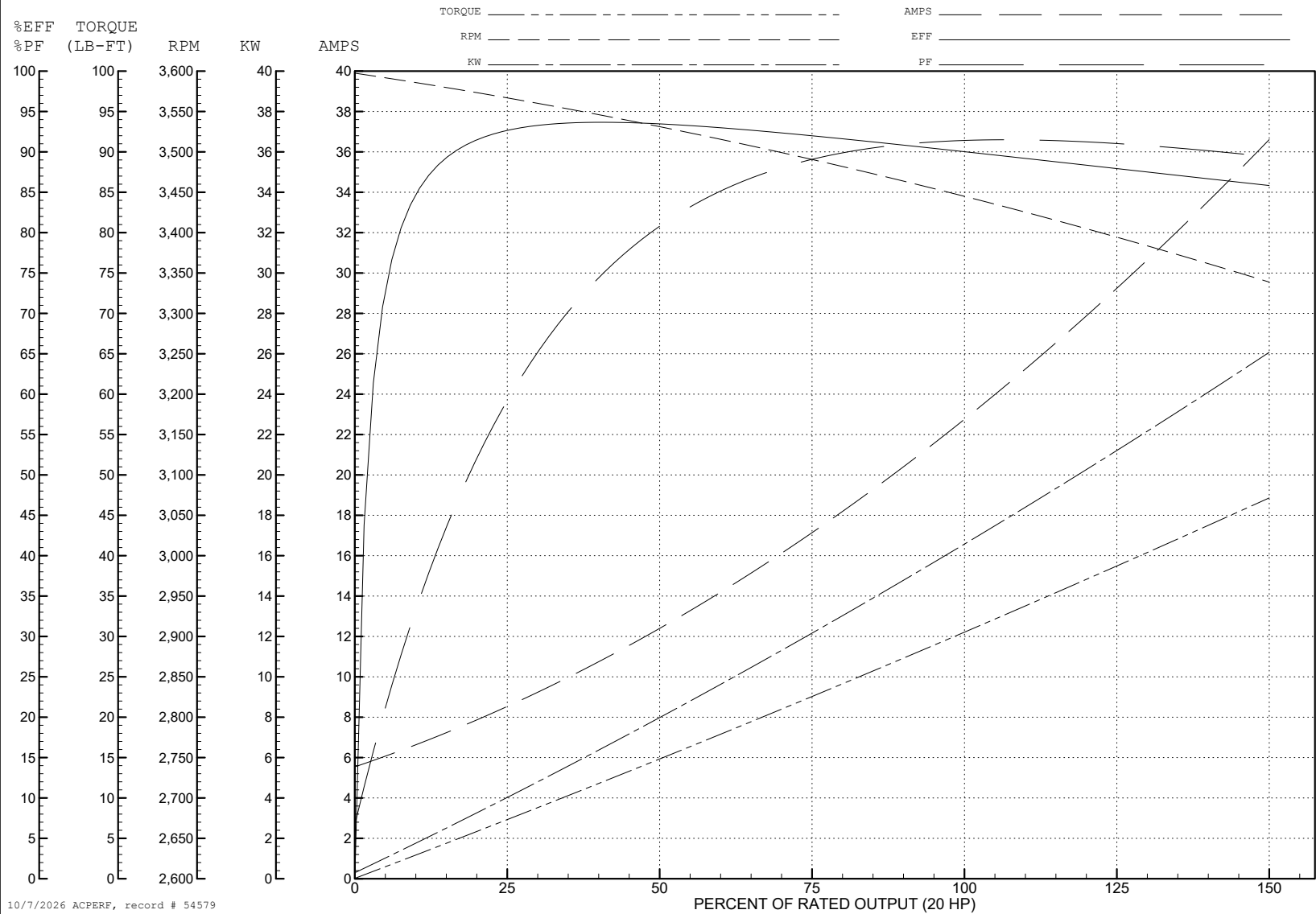
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WINDING # 37WGR893

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3447.9 RPM 460 V 3742M

TORQUES (LB-FT): PO=89.4 PU=45.9 LR=51.7 LRA=137



10/7/2026 ACPERF, record # 54579

AC Induction Motor Performance Data

Record # 54580

Typical performance - not guaranteed values

Winding: 37WGR893-R001		Type: 3742M	Enclosure: OPSB
Nameplate Data		380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	20//15	Full Load Torque	27.5 LB-FT
Volts	230/460//190/380	Start Configuration	direct on line
Full Load Amps	46/23//42/21	Breakdown Torque	86.8 LB-FT
R.P.M.	3450//2860	Pull-up Torque	43.4 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	53.1 LB-FT
NEMA Design Code	B KVA Code	Starting Current	138 A
Service Factor (S.F.)	1.15	No-load Current	5.84 A
NEMA Nom. Eff.	90.2 Power Factor	Line-line Res. @ 25°C	0.53993 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	60°C
S.F. Amps		Temp. Rise @ S.F. Load	79°C

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	82	88	90	91	90	91
Efficiency	91.7	92.8	91.8	90.1	88	85.5	88.8
Speed	2969.1	2938.6	2904.4	2866.5	2823	2775.5	2840
Line amperes	7.67	11.4	16	20.9	26.7	32.9	24.4

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WINDING # 37WGR893

Typical performance - not guaranteed values.

15 HP 3 PH 50 HZ 2866.5 RPM 380 V 3742M

TORQUES (LB-FT): PO=86.8 PU=43.4 LR=53.1 LRA=138

