

ABB BALDOR RELIANCE III

Customer information packet

FPM2549T-5

75HP, 3535RPM, 3PH, 60HZ, 364TS, 4250M, OPSB, F

Specifications

Enclosure	OPSB
Frame	364TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 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	67.000 A @ 575.0 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
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	67.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	G
Type	AC
Mech. spec.	42F98
Base	
Status	PRD/A
Elec. spec.	42WGX103
Layout	42LYF098
Eff. date	07-24-2023
CD Diagram	CD0382
Poles	02
Leads	6#6
Proprietary	False
Created date	07-20-2016

Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4250M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	25.81 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	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-5				CUST P/N					I.P.	23		
SPEC.	42F098X103H2				SER.NO.					FRAME	364TS		
HZ	60	HP	75		RPM	3535	HZ		HP		RPM		
VOLTS	575			CODE	F		VOLTS				CODE		
AMPS	67			DES	B		AMPS				DES		
EFF	93	SER.F.	1.15		PF	90	EFF			SER.F.		PF	
RATING	40C AMB-CONT				DE BRG	6313		GREASE	POLYREX EM				
BLANK					ODE BRG	6311		MTR. WT.	487				
					CLASS	F	PH	3					
					ENCL	OPSB	CC	010A					
HTR-VOLTS		HTR-AMPS		HTR-WATTS									

AC Induction Motor Performance Data

Record # 58312

Typical performance - not guaranteed values

Winding: 42WGX103-R001			Type: 4250M		Enclosure: OPSB			
Nameplate Data			575 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		75	Full Load Torque		112 LB-FT			
Volts		575	Start Configuration		direct on line			
Full Load Amps		67	Breakdown Torque		378 LB-FT			
R.P.M.		3535	Pull-up Torque		110 LB-FT			
Hz	60 Phase	3	Locked-rotor Torque		147 LB-FT			
NEMA Design Code		B	KVA Code	F	Starting Current		404 A	
Service Factor (S.F.)		1.15	No-load Current		15.5 A			
NEMA Nom. Eff.		93	Power Factor		90	Line-line Res. @ 25°C		0.145 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		41°C	
S.F. Amps					Temp. Rise @ S.F. Load		51°C	
					Locked-rotor Power Factor		21.2	
					Rotor inertia		3.91 LB-FT2	

Load Characteristics 575 V, 60 Hz, 75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	68	84	89	90	90	89	90
Efficiency	92.5	94.6	94.5	94	93	91.2	93.4
Speed	3585	3572	3556	3538	3518	3495	3526
Line amperes	22.4	35.3	50.3	67	84.7	104	77.6

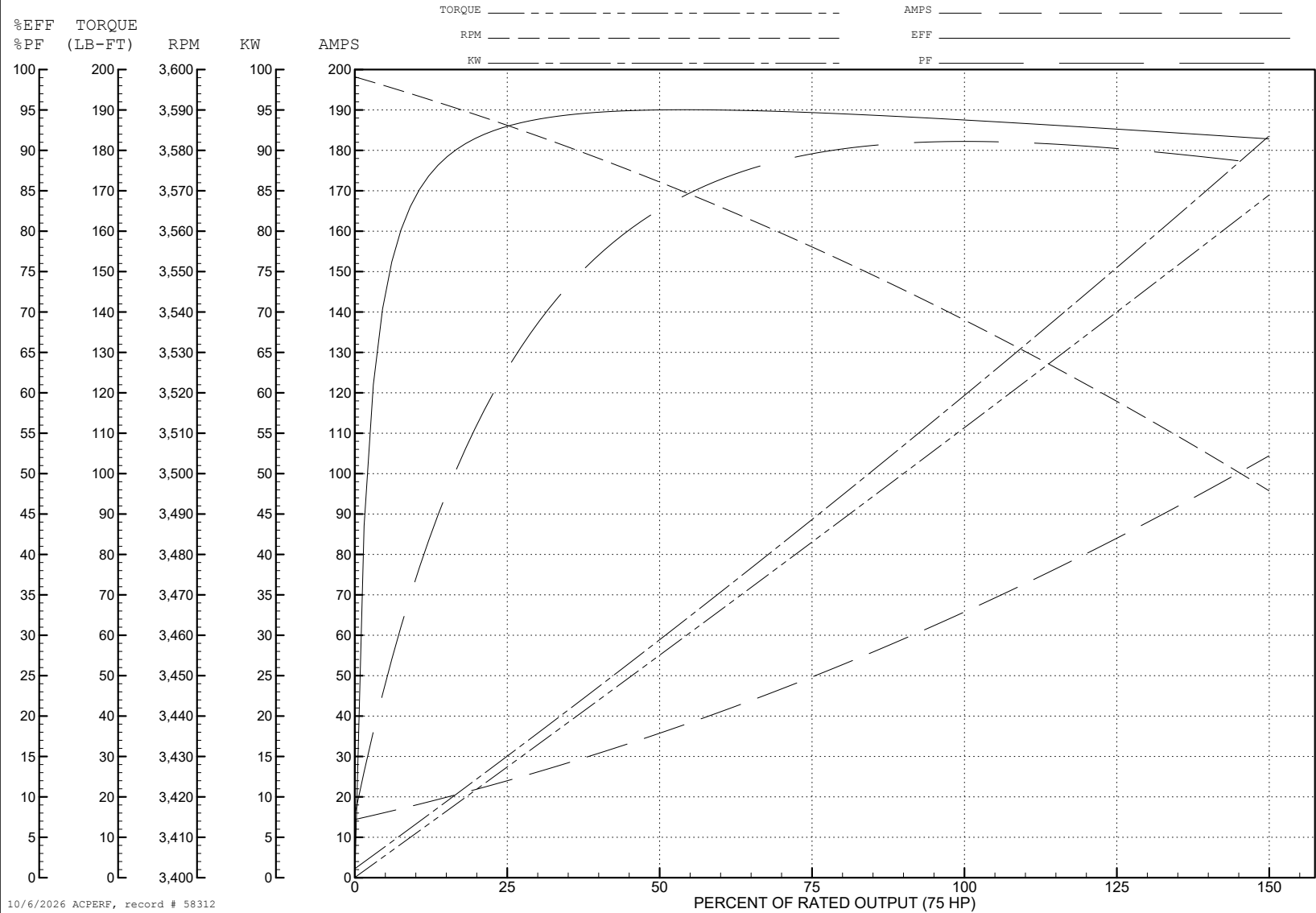
ABB Motors and Mechanical Inc.

WINDING # 42WGX103

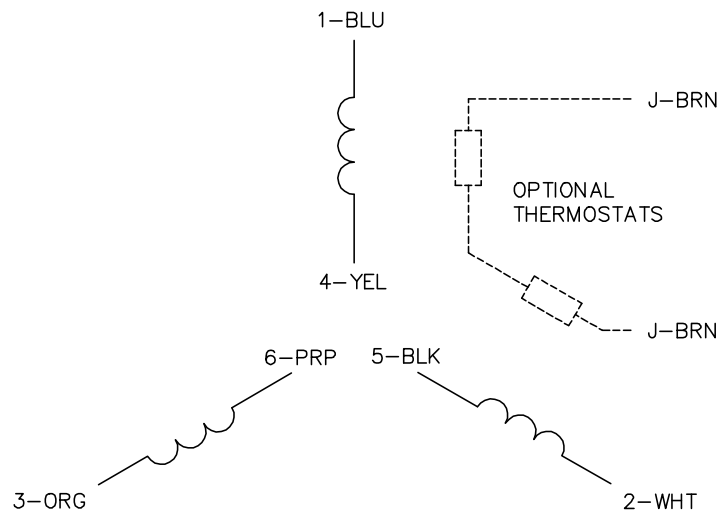
Typical performance - not guaranteed values.

75 HP 3 PH 60 HZ 3535 RPM 575 V 4250M

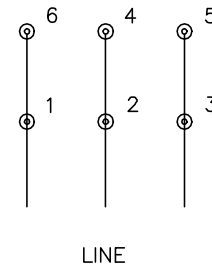
TORQUES (LB-FT): PO=378 PU=110 LR=147 LRA=404



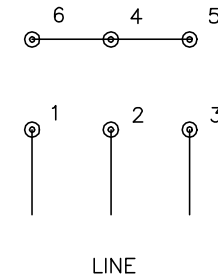
CD0382



**RUN CONNECTION
(1D)**



**START CONNECTION
(1Y)**



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.
5. FOR ACROSS-THE-LINE STARTING, USE 'RUN' CONNECTION.

REV. DESC: ADD CLASS CONN00000007

REV. LTR: F

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\243

REVISED: 09:05:32 02/19/2019

BY: ENBRIRO

MTL: -



BALDOR - RELIANCE®

3PH, SV, 6 LEADS, Y START/D RUN

SH 1 of 1

CD0382