

ABB BALDOR RELIANCE III

Customer information packet

FPM2539TS-5

40HP, 1770RPM, 3PH, 60HZ, 324TS, 4052M, ODP, F1

Specifications

Enclosure	ODP
Frame	324TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	39.000 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	39.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	E
Type	AC
Mech. spec.	40H07
Base	
Status	PRD/A
Elec. spec.	40WGX355
Layout	40LYH007
Eff. date	07-24-2023
CD Diagram	CD0382
Poles	04
Leads	6#10
Proprietary	False
Created date	07-20-2016

Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4052M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.69 IN
Power Factor	83
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	1770 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.	FPM2539TS-5				CUST P/N					I.P.	23		
SPEC.	40H007X355H2				SER.NO.					FRAME	324TS		
HZ	60	HP	40		RPM	1770		HZ		HP		RPM	
VOLTS	575			CODE	G			VOLTS				CODE	
AMPS	39			DES	B			AMPS				DES	
EFF	93	SER.F.	1.15		PF	83		EFF		SER.F.		PF	
RATING	40C AMB-CONT				DE BRG	6312		GREASE	POLYREX EM				
BLANK					ODE BRG	6309		MTR. WT.	3850				
					CLASS	F		PH	3				
					ENCL	ODP		CC	010A				
HTR-VOLTS		HTR-AMPS		HTR-WATTS									

AC Induction Motor Performance Data

Record # 58302

Typical performance - not guaranteed values

Winding: 40WGX355-R001			Type: 4052M		Enclosure: OPSB			
Nameplate Data			575 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		40	Full Load Torque		119 LB-FT			
Volts		575	Start Configuration		direct on line			
Full Load Amps		39	Breakdown Torque		322 LB-FT			
R.P.M.		1770	Pull-up Torque		157 LB-FT			
Hz	60 Phase	3	Locked-rotor Torque		195 LB-FT			
NEMA Design Code		B	KVA Code	G	Starting Current		228 A	
Service Factor (S.F.)		1.15	No-load Current		14.7 A			
NEMA Nom. Eff.		93	Power Factor		83	Line-line Res. @ 25°C		0.303 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		42°C	
S.F. Amps					Temp. Rise @ S.F. Load		50°C	
					Locked-rotor Power Factor		32	
					Rotor inertia		4.13 LB-FT2	

Load Characteristics 575 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	70	80	83	84	84	84
Efficiency	89	92.8	93.3	93.3	93	92.2	93.1
Speed	1793	1787	1780	1772	1764	1755	1767
Line amperes	18	23.4	30.5	38.8	47.8	57.7	44.2

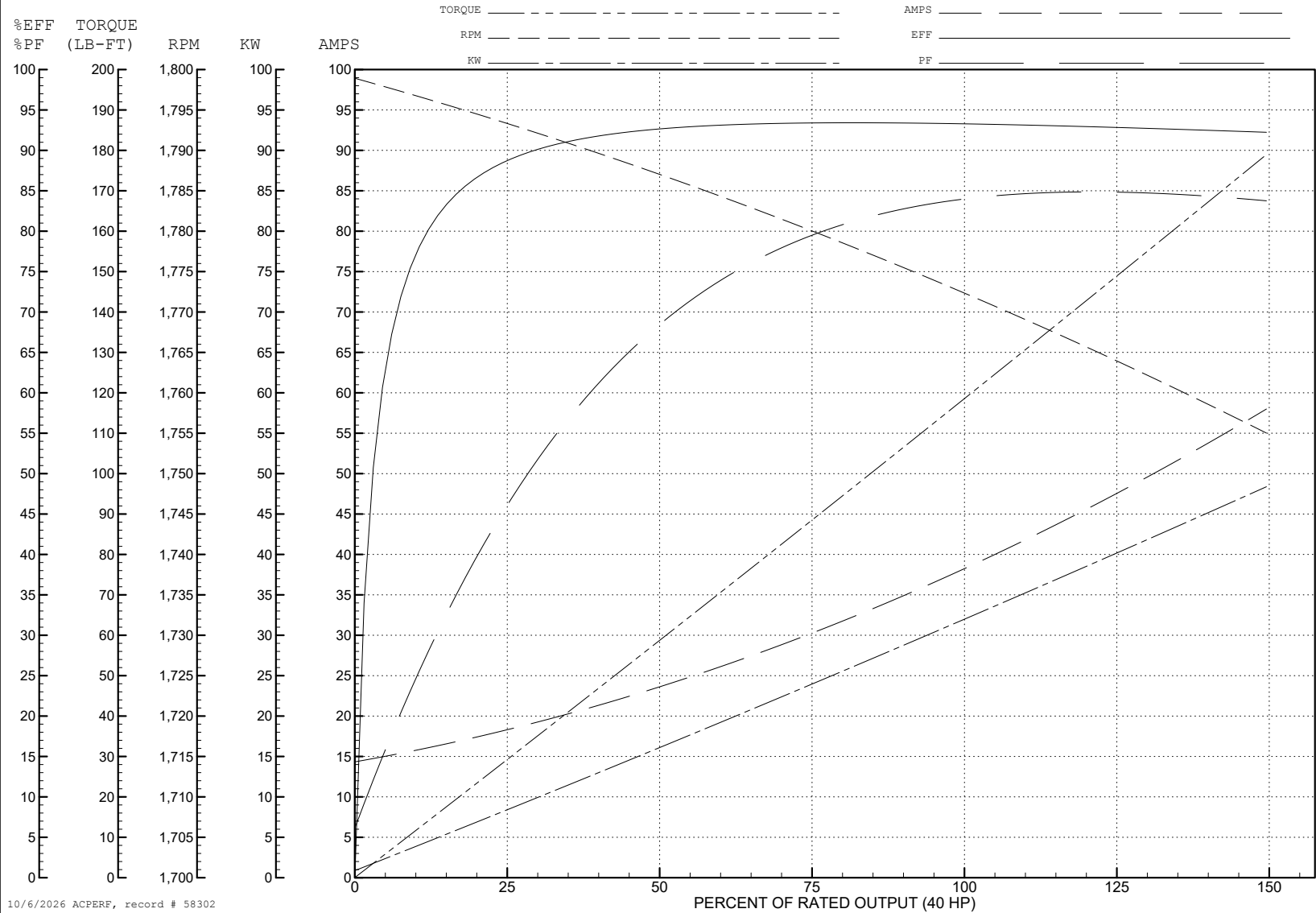
ABB Motors and Mechanical Inc.

WINDING # 40WGX355

Typical performance - not guaranteed values.

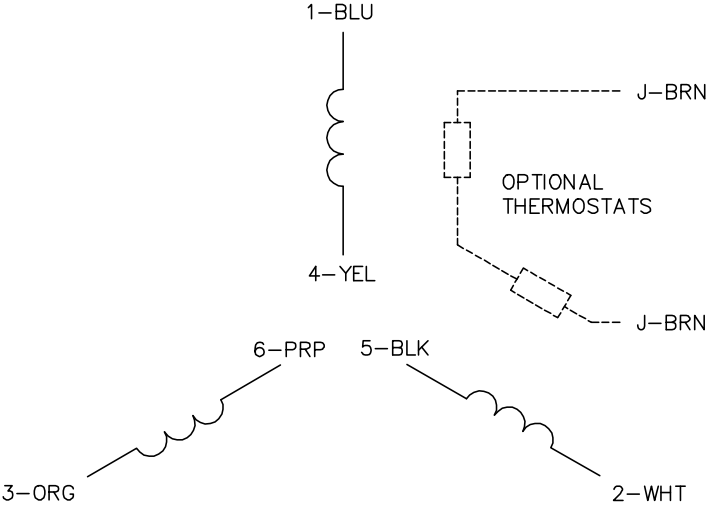
40 HP 3 PH 60 HZ 1770 RPM 575 V 4052M

TORQUES (LB-FT): PO=322 PU=157 LR=195 LRA=228

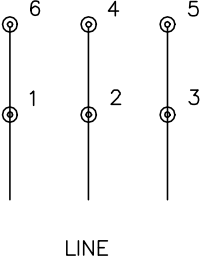




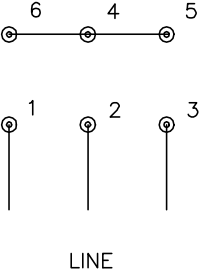
CD0382



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.

CD0382

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
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