

ABB BALDOR RELIANCE III

Customer information packet

FPM2547TS

60//50HP, 1770//1470RPM, 3PH, 60//50HZ, 364T

Specifications

Enclosure	ODP
Frame	364TS
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	60.000 HP @ 60 HZ 50.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	CSA EEV UL UR CSA
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	72.000 A @ 460.0 V 72.000 A @ 380.0 V 144.000 A @ 230.0 V 144.000 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %

Part Detail

Revision	K
Type	AC
Mech. spec.	42F98
Base	
Status	PRD/A
Elec. spec.	42WGW980
Layout	42LYF098
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	11-02-2015

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	72.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4252M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.81 IN
Power Factor	84
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	1470 rpm 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.	FPM2547TS				CUST P/N				I.P.				23			
SPEC.	42F098W980H2				SER.NO.				FRAME				364TS			
HZ	60	HP	60		RPM	1770		HZ	50		HP	50		RPM	1470	
VOLTS	230/460				CODE	F		VOLTS	190/380				CODE	F		
AMPS	144/72				DES	B		AMPS	144/72				DES	B		
EFF	93.6	SER.F.		1.15		PF	84		EFF	93		SER.F.	1.15		PF	84
RATING	40C AMB-CONT					DE BRG		6313			GREASE		POLYREX EM			
BLANK						ODE BRG		6311			MTR. WT.		475			
						CLASS		F		PH		3				
						ENCL		ODP			CC		010A			
HTR-VOLTS			HTR-AMPS				HTR-WATTS									

AC Induction Motor Performance Data

Record # 54369

Typical performance - not guaranteed values

Winding: 42WGW980-R001			Type: 4252M		Enclosure: OPSB			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		60//50		Full Load Torque		178 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		144/72		Breakdown Torque		489 LB-FT		
R.P.M.		1770//1470		Pull-up Torque		222 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		299 LB-FT	
NEMA Design Code		B		KVA Code	F	Starting Current		406 A
Service Factor (S.F.)		1.15		No-load Current		26.6 A		
NEMA Nom. Eff.		93.6	Power Factor		83	Line-line Res. @ 25°C		0.13192 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C		
S.F. Amps				Temp. Rise @ S.F. Load		67°C		
				Locked-rotor Power Factor		27.7		

Load Characteristics 460 V, 60 Hz, 60 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	70	80	84	85	84	85
Efficiency	91.3	93.9	94.2	93.6	92.8	91.5	93.1
Speed	1794	1787.2	1780.6	1772.3	1764.4	1753	1768
Line amperes	31.4	42	56.1	71.8	89	109	82.1

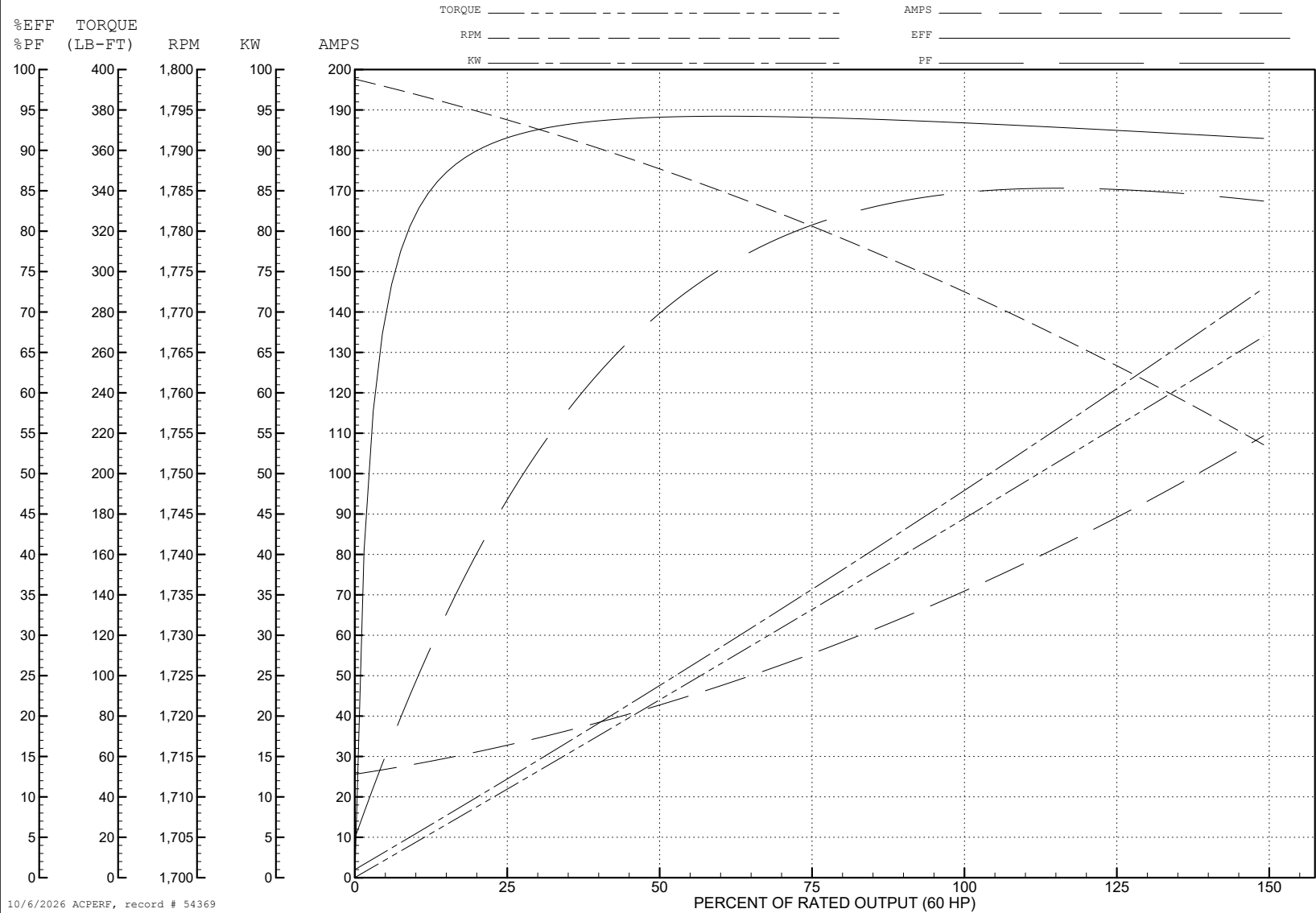
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WINDING # 42WGW980

60 HP 3 PH 60 HZ 1772.3 RPM 460 V 4252M

Typical performance - not guaranteed values.

TORQUES (LB-FT) : PO=489 PU=222 LR=299 LRA=406



AC Induction Motor Performance Data

Record # 54370

Typical performance - not guaranteed values

Winding: 42WGW980-R001				Type: 4252M		Enclosure: OPSB	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		60//50		Full Load Torque		179 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		144/72		Breakdown Torque		472 LB-FT	
R.P.M.		1770//1470		Pull-up Torque		233 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		314 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		397 A
Service Factor (S.F.)		1.15		No-load Current		25.7 A	
NEMA Nom. Eff.		93.6	Power Factor	83	Line-line Res. @ 25°C		0.13 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		55°C	
S.F. Amps				Temp. Rise @ S.F. Load		69°C	
				Locked-rotor Power Factor		30.9	
				Rotor inertia		6.93 LB-FT2	

Load Characteristics 380 V, 50 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	72	81	85	86	84	86
Efficiency	90.8	93.3	93	93.1	91.7	90	92.3
Speed	1494	1487	1480	1472	1464	1453	1467
Line amperes	30.7	41.6	56.1	72.3	90.1	111	83

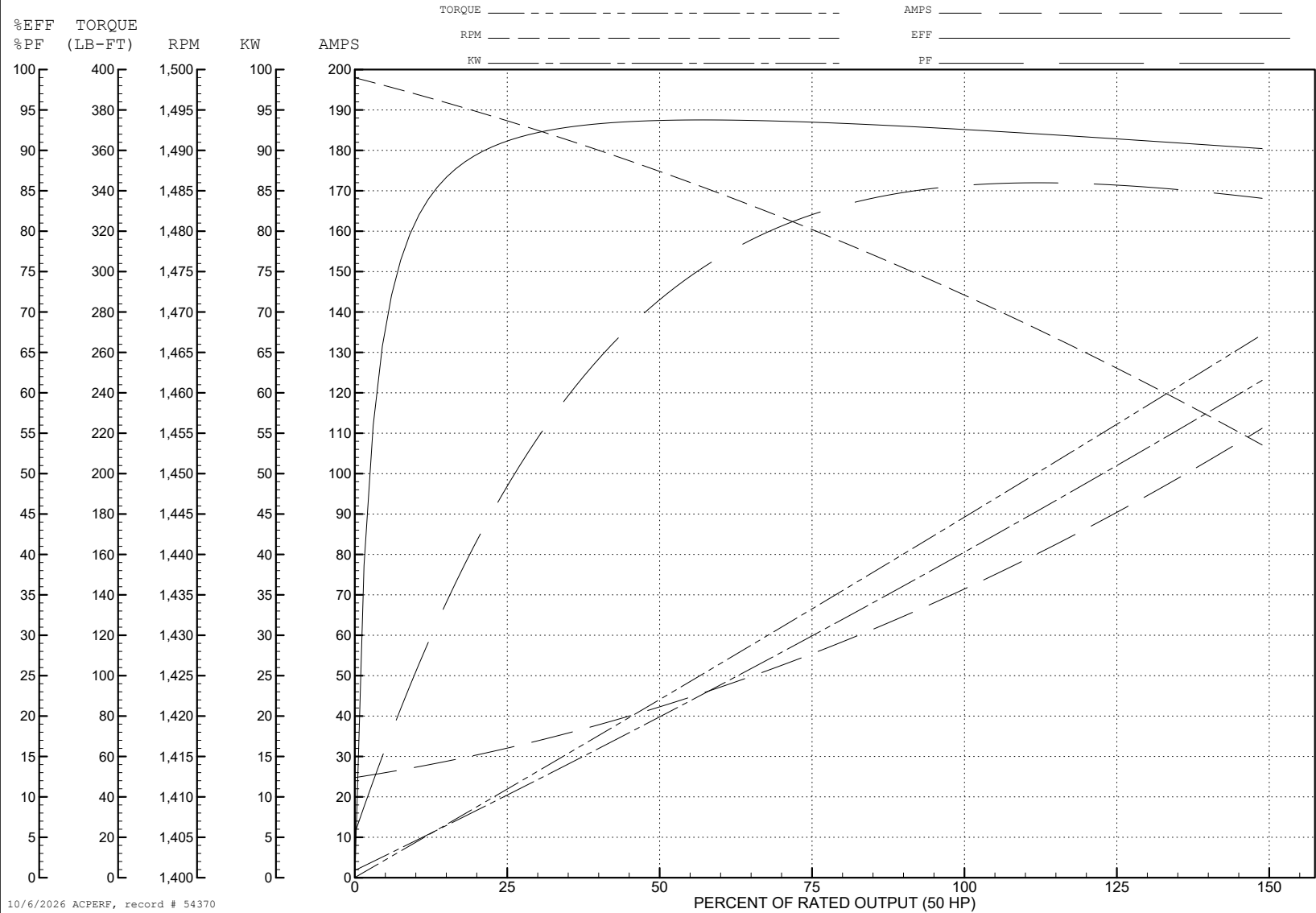
ABB Motors and Mechanical Inc.

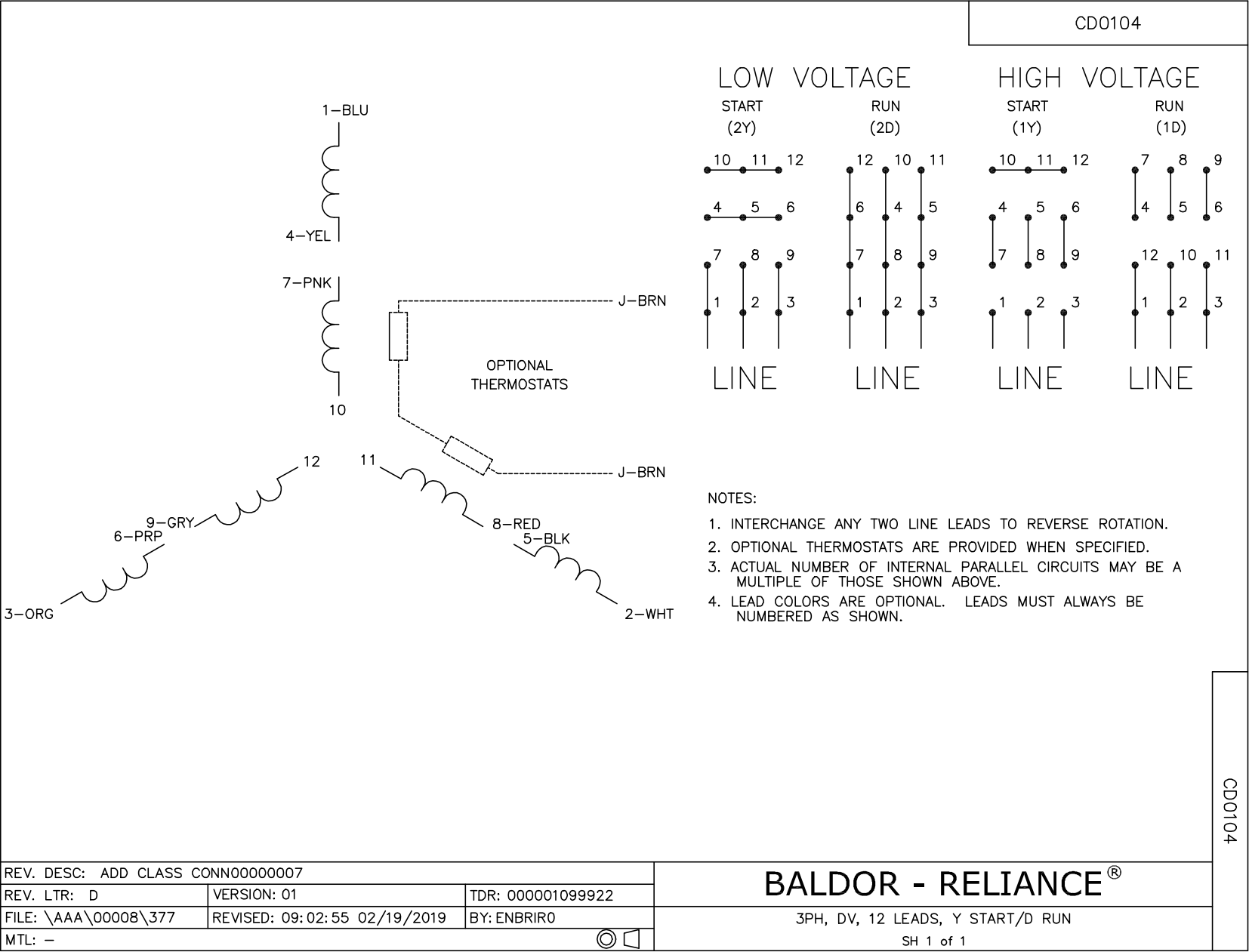
WINDING # 42WGW980

Typical performance - not guaranteed values.

50 HP 3 PH 50 HZ 1472 RPM 380 V 4252M

TORQUES (LB-FT): PO=472 PU=233 LR=314 LRA=397





REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

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FILE: \AAA\00008\377

REVISED: 09:02:55 02/19/2019

BY: ENBRIR0

MTL: —

BALDOR - RELIANCE®

3PH, DV, 12 LEADS, Y START/D RUN

SH 1 of 1

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