BALDOR • RELIANCE

Customer information packet

FPM2559TS-4

125//100HP, 1775//1475RPM, 3PH, 60//50HZ, 40

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Specifications

Enclosure	OPSB
Frame	405TS
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	1500 RPM @ 50 HZ
Voltage @ Frequency	380.0 V @ 50 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA EEV
	UL
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	145.000 A @ 460.0 V
	141.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
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	141.0 a

Part detail

Revision	N
Type	AC
Mech. spec.	44E020
Base	
Status	PRD/A
Elec. spec.	44WGW359
Layout	44LYE020
Eff. date	11-19-2024
CD Diagram	CD1480
Poles	04
Leads	12#2
Proprietary	False
Created date	09-17-2015

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 @ 2 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4476M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.60 IN
Power Factor	85
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	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1475 rpm 1775 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.	FPM2559TS-4			**CUST P/N**				**I.P.**	23			
SPEC.	44E020W359H2			**SER.NO.**				**FRAME**	405TS			
HZ	60	**HP**	125	**RPM**	1775	**HZ**	50	**HP**	100	**RPM**	1475	
VOLTS	460			**CODE**	F	**VOLTS**	380			**CODE**	F	
AMPS	145			**DES**	B	**AMPS**	141			**DES**	B	
EFF	94.5	**SER.F.**	1.15	**PF**	85	**EFF**	94.1	**SER.F.**	1.15	**PF**	85	
RATING	40C AMB-CONT			**DE BRG**	6313			**GREASE**	POLYREX EM			
BLANK				**ODE BRG**	6312			**MTR. WT.**	595			
				CLASS	F	**PH**	3					
				ENCL	OPSB	**CC**	010A					
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**								

AC Induction Motor Performance Data
Record # 52882
Typical performance - not guaranteed values

Winding: 44WGW359-R001	**Type:** 4476M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			125//100	**Full Load Torque**	369 LB-FT
Volts			460//380	**Start Configuration**	direct on line
Full Load Amps			145//141	**Breakdown Torque**	991 LB-FT
R.P.M.			1775//1475	**Pull-up Torque**	385 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	490 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	845 A
Service Factor (S.F.)			1.15	**No-load Current**	42.8 A
NEMA Nom. Eff.	94.5	**Power Factor**	85	**Line-line Res. @ 25ºC**	0.0453 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	48°C
S.F. Amps				**Temp. Rise @ S.F. Load**	58°C
				Locked-rotor Power Factor	24.7
				Rotor inertia	14.4 LB-FT2

Load Characteristics 460 V, 60 Hz, 125 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	58	77	83	85	85	84	85
Efficiency	92.6	95.2	95.1	94.6	93.9	93	94.2
Speed	1795	1790	1784	1777	1769	1761	1772
Line amperes	55.1	80.2	111	145	182	223	167

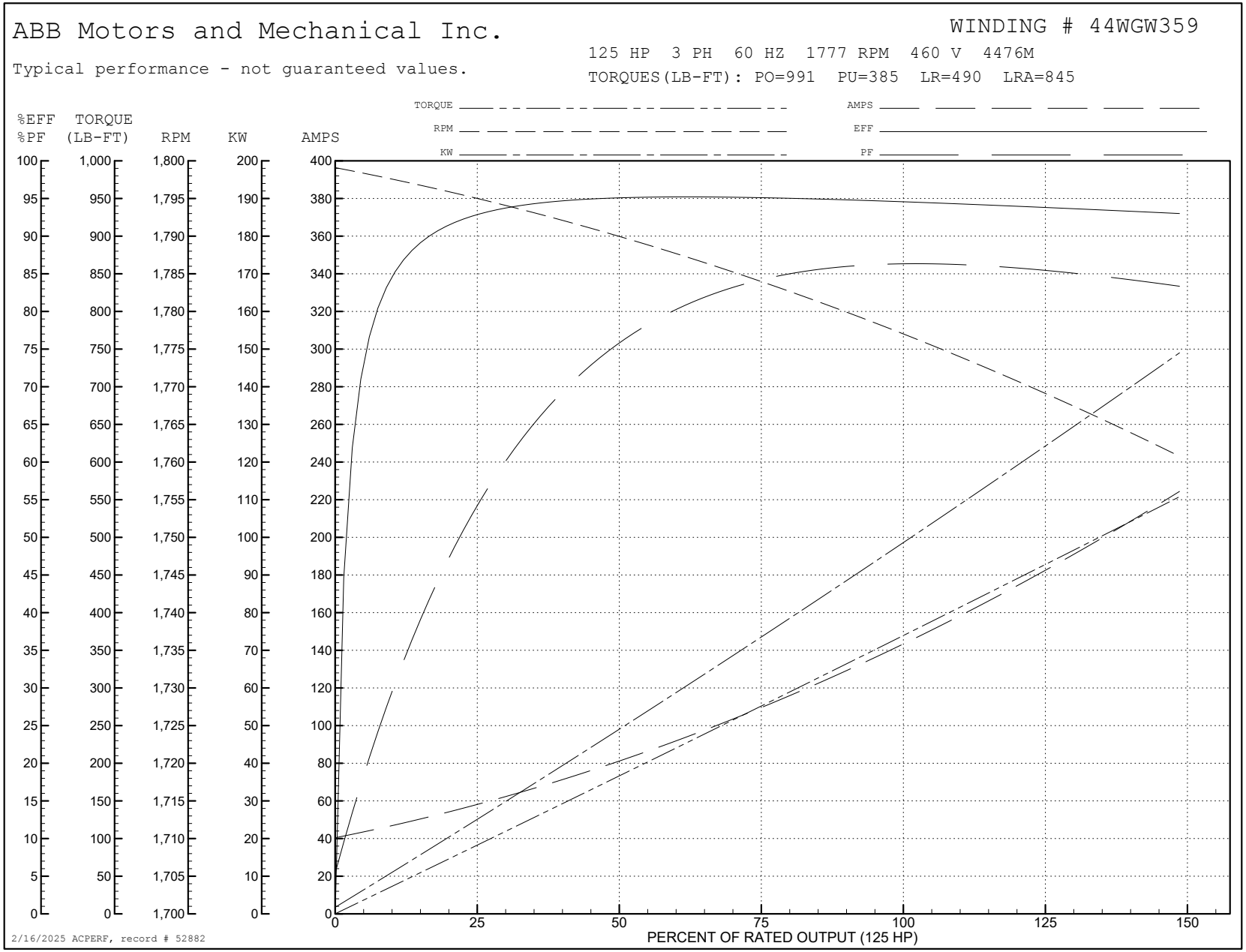


ABB Motors and Mechanical Inc.
WINDING # 44WGW359
125 HP 3 PH 60 HZ 1777 RPM 460 V 4476M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=991 PU=385 LR=490 LRA=845
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (125 HP)
2/16/2025 ACPERF, record # 52882

AC Induction Motor Performance Data
Record # 52883
Typical performance - not guaranteed values

Winding: 44WGW359-R001	**Type:** 4476M	**Enclosure:** OPSB

Nameplate Data				**380 V, 50 Hz: Single Voltage Motor**	
Rated Output (HP)			125//100	**Full Load Torque**	355 LB-FT
Volts			460//380	**Start Configuration**	direct on line
Full Load Amps			145//141	**Breakdown Torque**	962 LB-FT
R.P.M.			1775//1475	**Pull-up Torque**	406 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	517 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	829 A
Service Factor (S.F.)			1.15	**No-load Current**	42 A
NEMA Nom. Eff.	94.5	**Power Factor**	85	**Line-line Res. @ 25ºC**	0.0453 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	45°C
S.F. Amps				**Temp. Rise @ S.F. Load**	55°C
				Locked-rotor Power Factor	27.4
				Rotor inertia	14.4 LB-FT2

Load Characteristics 380 V, 50 Hz, 100 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	57	77	84	85	85	84	85
Efficiency	92.9	94.7	94.9	94.3	93.5	92.4	93.9
Speed	1495	1490	1485	1478	1470	1463	1473
Line amperes	53.7	77.9	107	141	177	217	163

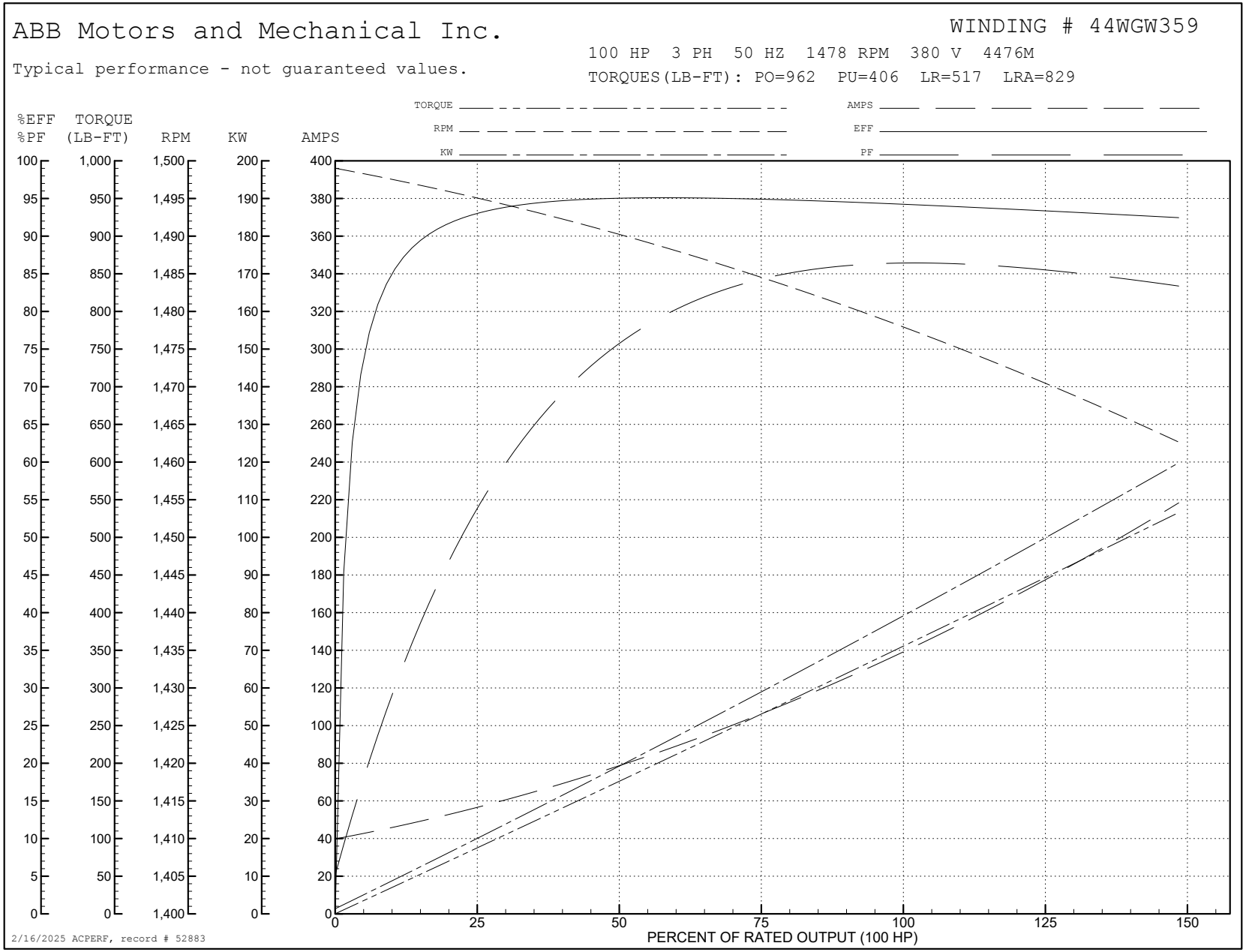
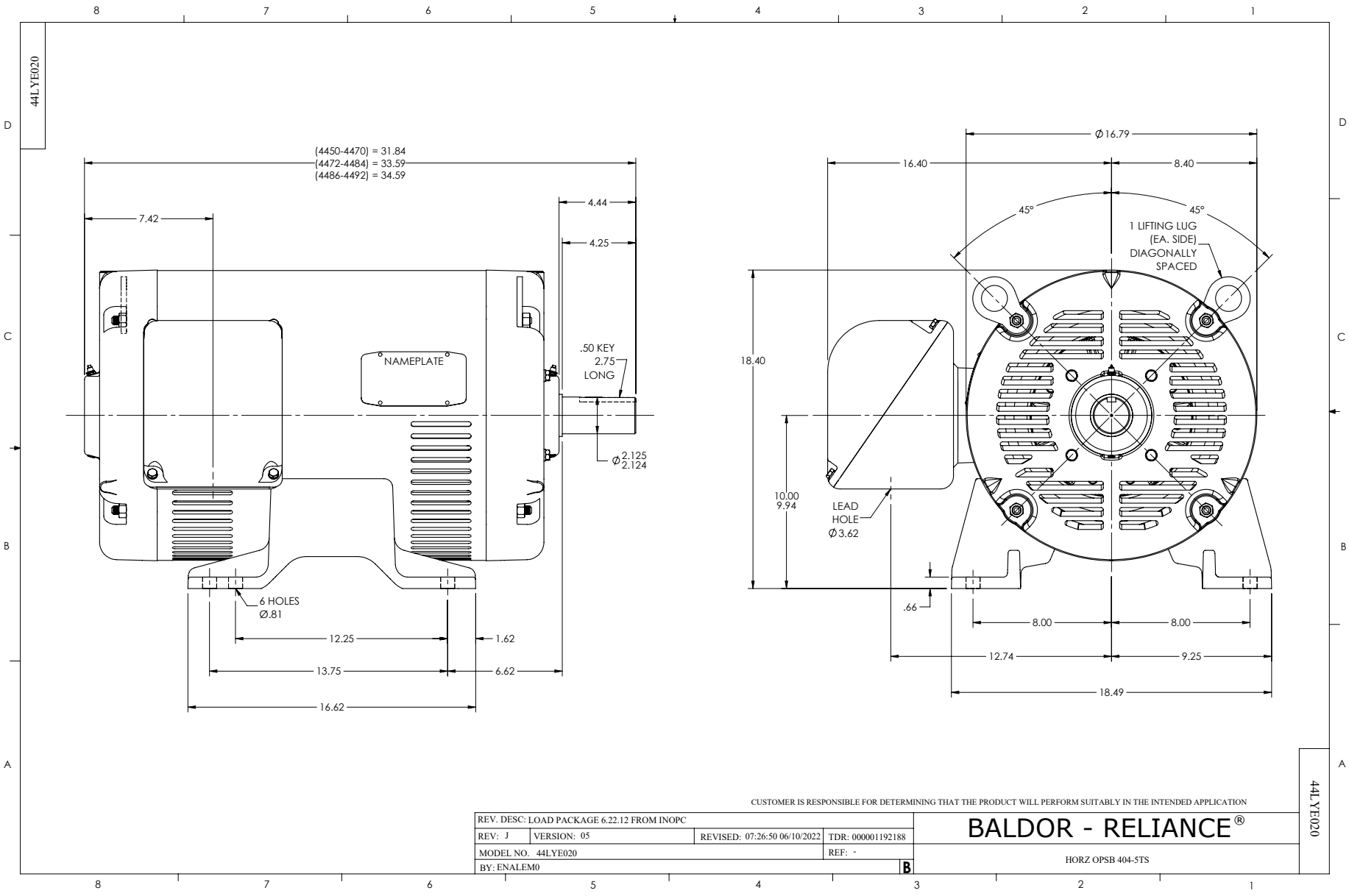
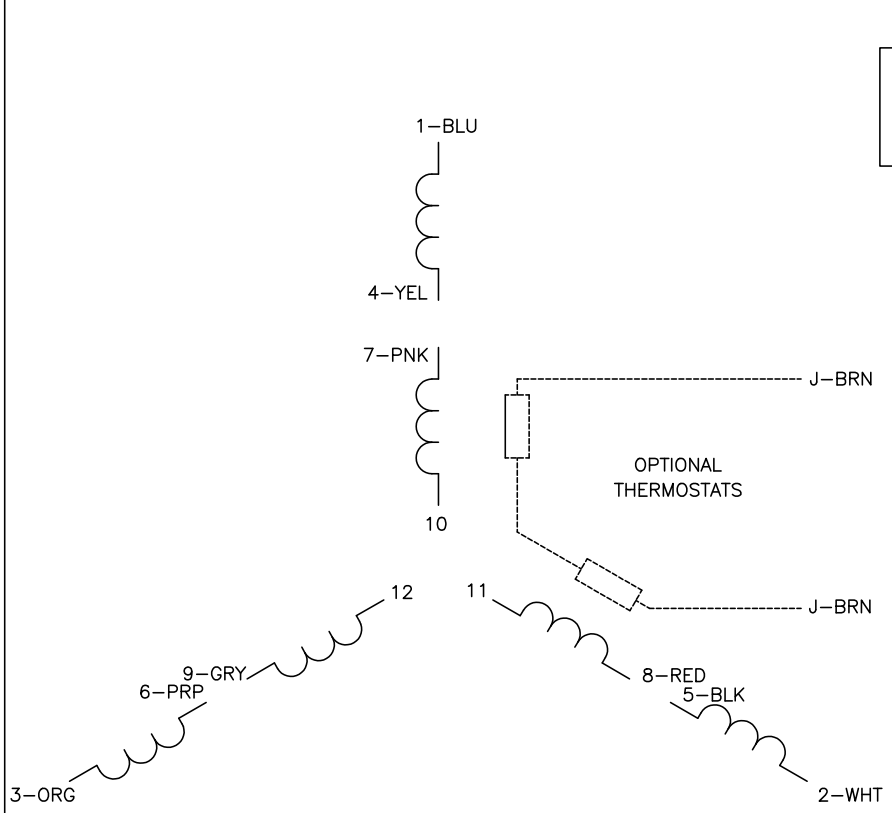
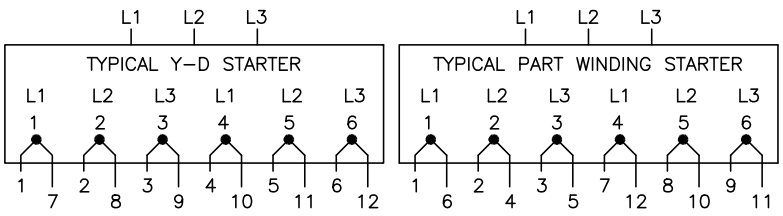


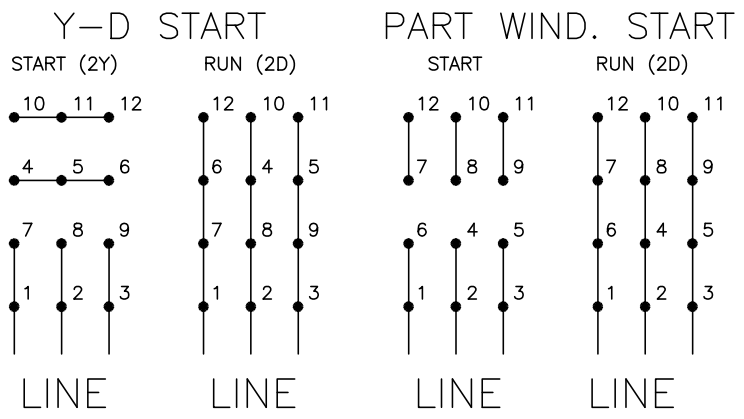
ABB Motors and Mechanical Inc.
WINDING # 44WGW359
Typical performance - not guaranteed values.
100 HP 3 PH 50 HZ 1478 RPM 380 V 4476M
TORQUES(LB-FT): PO=962 PU=406 LR=517 LRA=829
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (100 HP)
2/16/2025 ACPERF, record # 52883


44LYE020
(4450-4470) = 31.84
(4472-4484) = 33.59
(4486-4492) = 34.59
7.42
4.44
4.25
NAMEPLATE
.50 KEY
2.75
LONG
Ø2.125
2.124
6 HOLES
Ø.81
12.25
1.62
13.75
6.62
16.62
Ø16.79
16.40
8.40
45°
45°
1 LIFTING LUG
(EA. SIDE)
DIAGONALLY
SPACED
18.40
10.00
9.94
LEAD
HOLE
Ø3.62
.66
8.00
8.00
12.74
9.25
18.49
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD PACKAGE 6.22.12 FROM INOPC
REV: J
VERSION: 05
REVISED: 07:26:50 06/10/2022
TDR: 000001192188
MODEL NO. 44LYE020
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ OPSB 404-5TS
44LYE020

CD1480







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.

CD1480

REV. DESC: NEW			BALDOR ELECTRIC Co.
REV. LTR: –	BY: JLP	REVISED: 08/11/00 11:58	TDR: 0216508
CD1480		FILE: AAA00078050	REF: –
		MTL: –	3PH, SV, 12 LEADS, PWS OR Y START/D RUN