BALDOR • RELIANCE

Customer information packet

FPM2554T-4

125//100HP, 3540//2940RPM, 3PH, 60//50HZ, 40

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Specifications

Enclosure	OPSB
Frame	404TS
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	3000 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	138.000 A @ 460.0 V
	135.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
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	135.0 a

Part detail

Revision	M
Type	AC
Mech. spec.	44E020
Base	
Status	PRD/A
Elec. spec.	44WGW358
Layout	44LYE020
Eff. date	11-19-2024
CD Diagram	CD1480
Poles	02
Leads	12#6
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 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4456M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	31.85 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	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2940 rpm
	3540 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.	FPM2554T-4			**CUST P/N**				**I.P.**	23			
SPEC.	44E020W358H2			**SER.NO.**				**FRAME**	404TS			
HZ	60	**HP**	125	**RPM**	3540	**HZ**	50	**HP**	100	**RPM**	2940	
VOLTS	460			**CODE**	F	**VOLTS**	380			**CODE**	G	
AMPS	138			**DES**	B	**AMPS**	135			**DES**	B	
EFF	93.6	**SER.F.**	1.15	**PF**	90	**EFF**	93	**SER.F.**	1.15	**PF**	90	
RATING	40C AMB-CONT			**DE BRG**	6313			**GREASE**	POLYREX EM			
BLANK				**ODE BRG**	6312			**MTR. WT.**	632			
				CLASS	F	**PH**	3					
				ENCL	OPSB	**CC**	010A					
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**								

AC Induction Motor Performance Data
Record # 52872
Typical performance - not guaranteed values

Winding: 44WGW358-R001	**Type:** 4454M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			125//100	**Full Load Torque**	185 LB-FT
Volts			460//380	**Start Configuration**	direct on line
Full Load Amps			138//135	**Breakdown Torque**	594 LB-FT
R.P.M.			3540//2940	**Pull-up Torque**	209 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	266 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	906 A
Service Factor (S.F.)			1.15	**No-load Current**	32.1 A
NEMA Nom. Eff.	93.6	**Power Factor**	90	**Line-line Res. @ 25ºC**	0.0694 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	53°C
S.F. Amps				**Temp. Rise @ S.F. Load**	65°C
				Locked-rotor Power Factor	24.4
				Rotor inertia	7.32 LB-FT2

Load Characteristics 460 V, 60 Hz, 125 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	68	85	89	91	90	89	90
Efficiency	90.3	93.5	94.1	93.6	93.4	92.1	93.5
Speed	3588	3575	3562	3548	3533	3516	3539
Line amperes	48.1	74.2	105	138	173	212	159

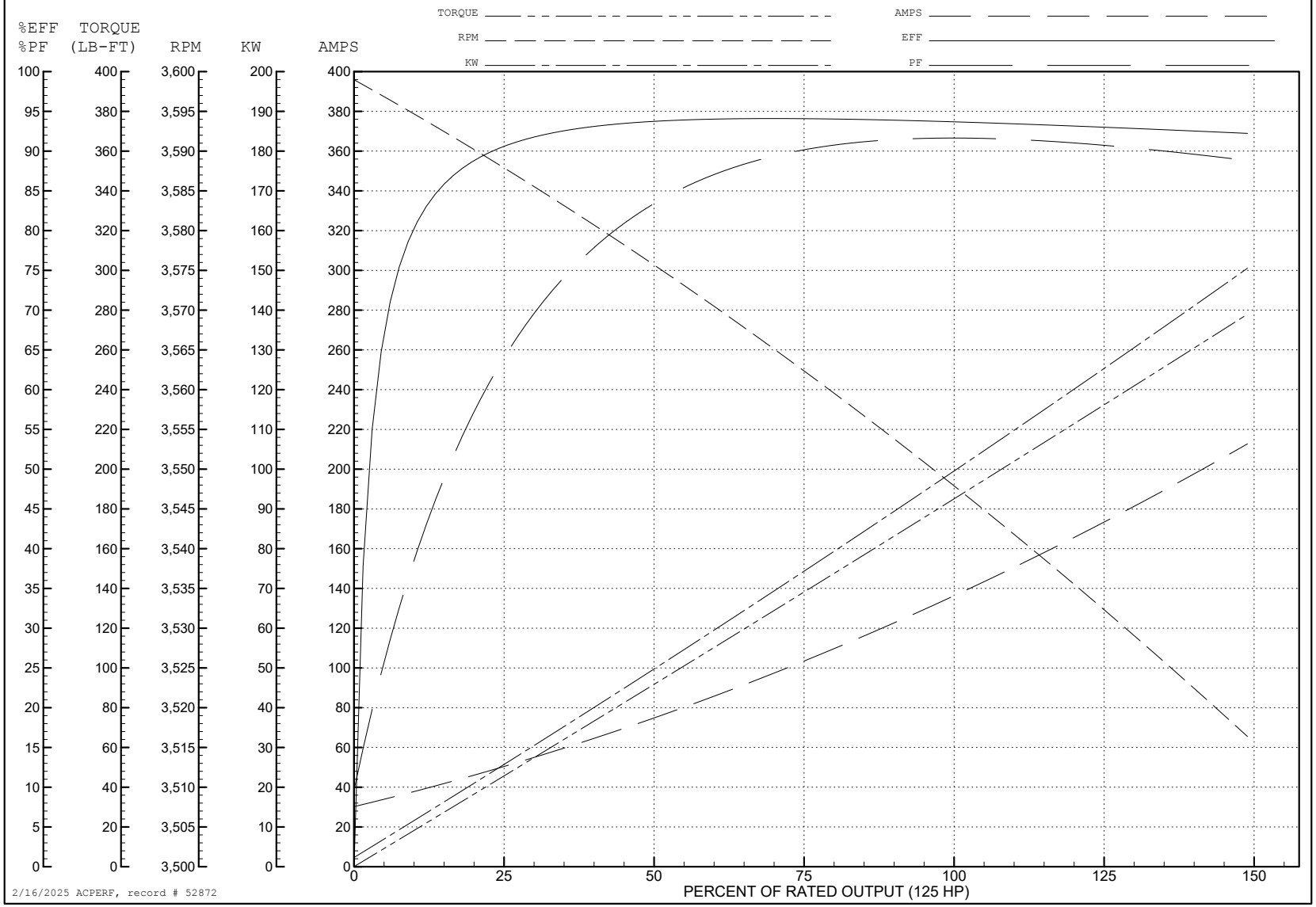
ABB Motors and Mechanical Inc.

WINDING # 44WGW358

125 HP 3 PH 60 HZ 3548 RPM 460 V 4454M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=594 PU=209 LR=266 LRA=906



AC Induction Motor Performance Data
Record # 52873
Typical performance - not guaranteed values

Winding: 44WGW358-R001	**Type:** 4456M	**Enclosure:** OPSB

Nameplate Data				**380 V, 50 Hz: Single Voltage Motor**	
Rated Output (HP)			125//100	**Full Load Torque**	178 LB-FT
Volts			460//380	**Start Configuration**	direct on line
Full Load Amps			138//135	**Breakdown Torque**	572 LB-FT
R.P.M.			3540//2940	**Pull-up Torque**	220 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	281 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	883 A
Service Factor (S.F.)			1.15	**No-load Current**	31.5 A
NEMA Nom. Eff.	93.6	**Power Factor**	90	**Line-line Res. @ 25ºC**	0.0694 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	50°C
S.F. Amps				**Temp. Rise @ S.F. Load**	63°C
				Locked-rotor Power Factor	27.6
				Rotor inertia	7.32 LB-FT2

Load Characteristics 380 V, 50 Hz, 100 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	68	85	89	91	91	90	91
Efficiency	91.1	93.7	93.8	93.3	92.9	91.5	93.1
Speed	2989	2976	2964	2951	2937	2920	2943
Line amperes	46.6	71.8	102	134	168	206	154

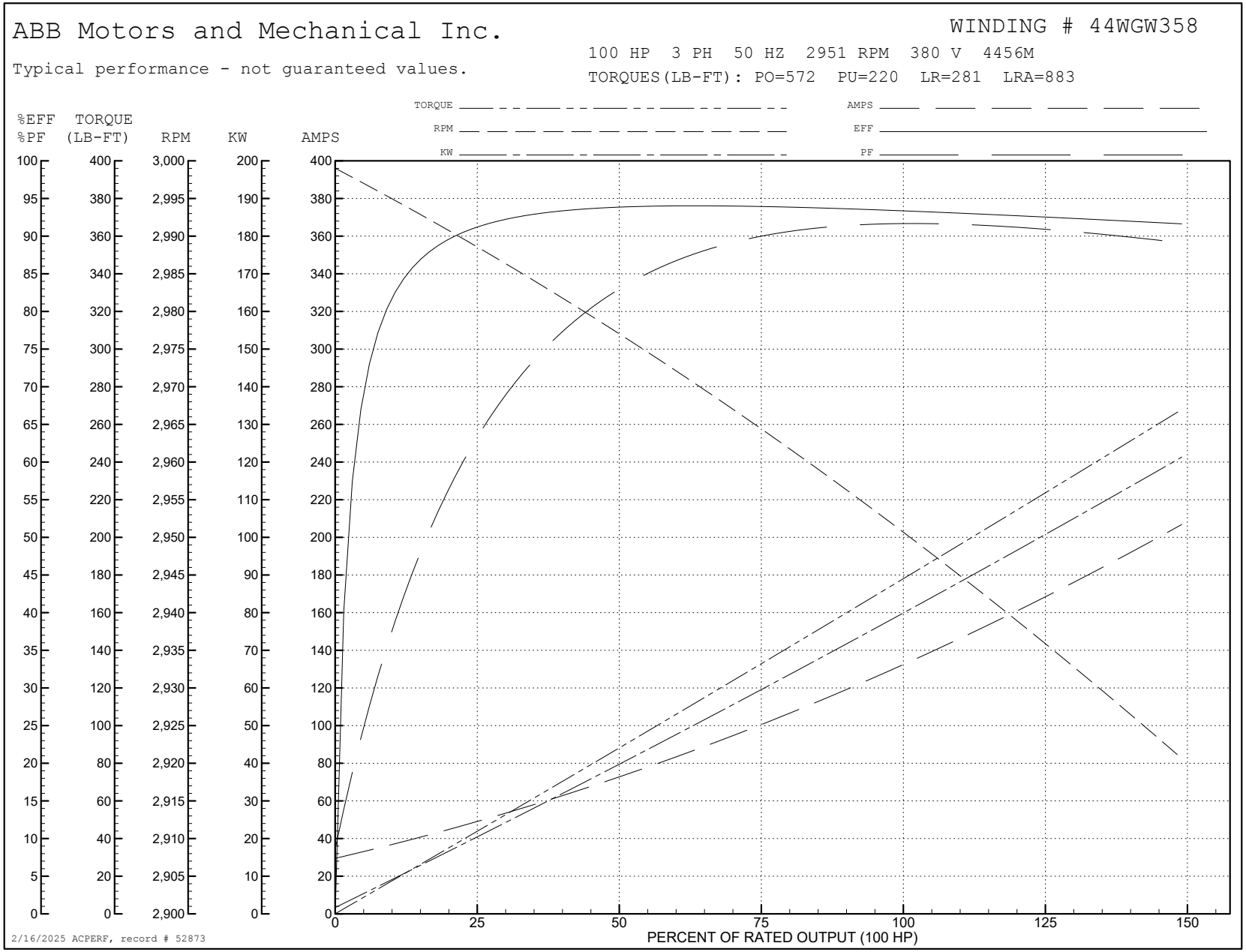
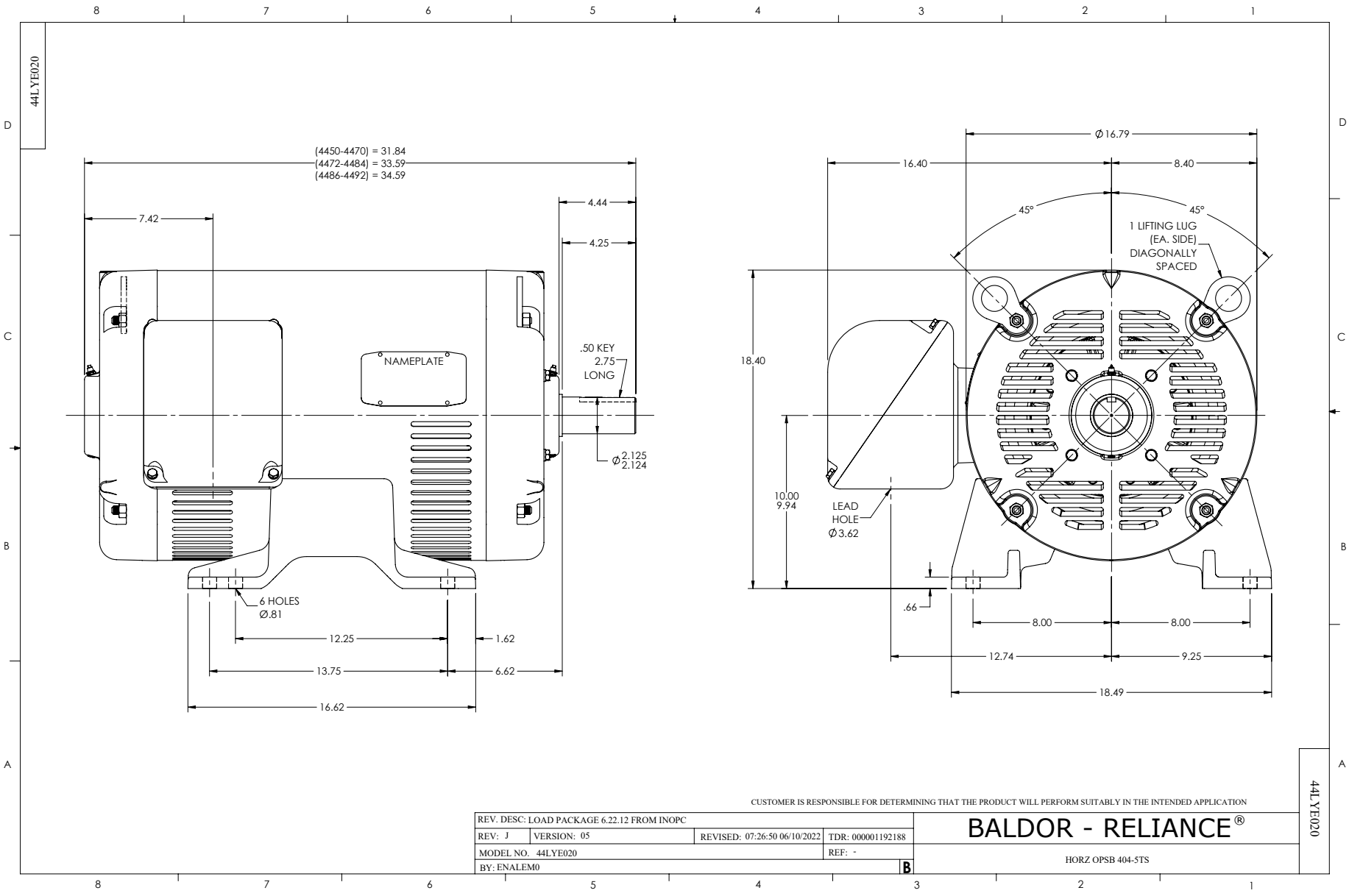
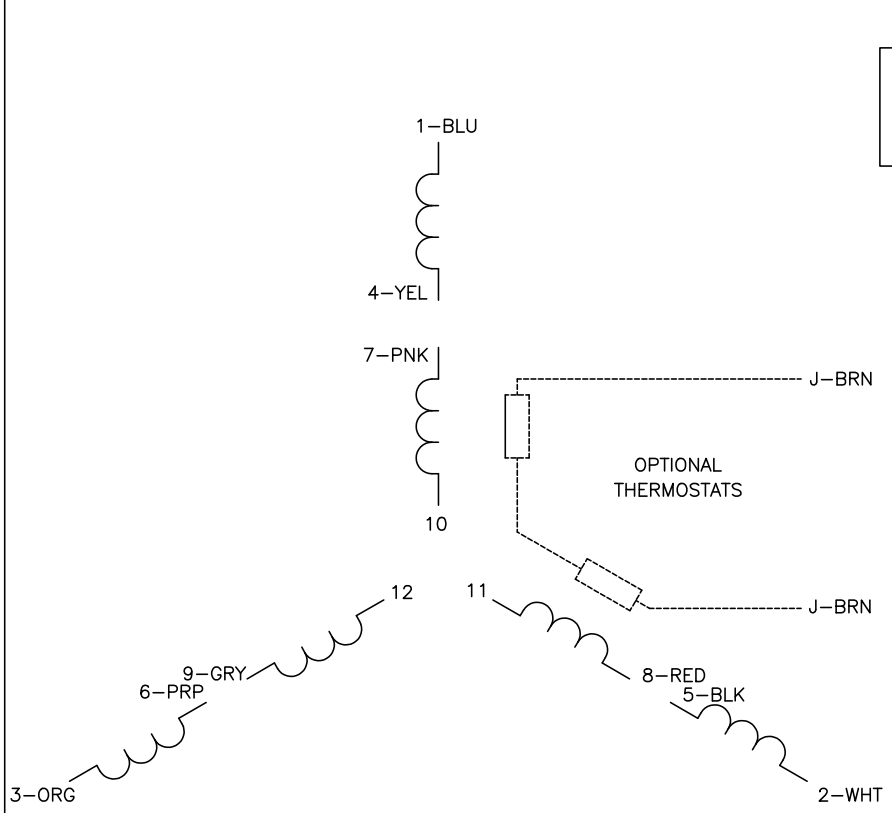
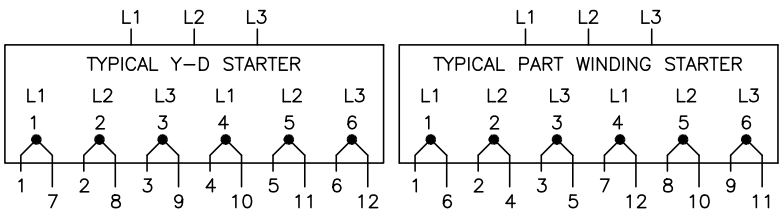


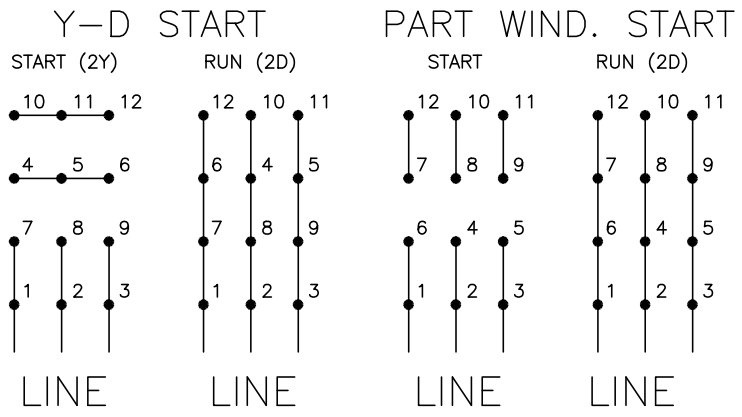
ABB Motors and Mechanical Inc.
WINDING # 44WGW358
Typical performance - not guaranteed values.
100 HP 3 PH 50 HZ 2951 RPM 380 V 4456M
TORQUES(LB-FT): PO=572 PU=220 LR=281 LRA=883
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
2/16/2025 ACPERF, record # 52873
PERCENT OF RATED OUTPUT (100 HP)


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