

ABB BALDOR RELIANCE III

Customer information packet

PCL3519M

3HP, 3450RPM, 1PH, 60HZ, 56C, 3532LC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	3.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
Agency Approvals	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	12.500 A @ 230.0 V 13.700 A @ 208.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.0 %
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	12.5 a
Insulation Class	F

Part Detail

Revision	AL
Type	AC
Mech. spec.	35T974
Base	
Status	PRD/A
Elec. spec.	35WGY870
Layout	35LYT974
Eff. date	05-07-2024
CD Diagram	CD0002A02
Poles	02
Leads	2#14 A PH,3#18 B&J
Proprietary	False
Created date	06-22-2007

Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 14 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3532LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.12 IN
Power Factor	95
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Do Not Use
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Manual Thermal Overload
Winding Thermal 1 Location	KO
Winding Thermal 2	None

Nameplate

NP1257L									
CAT.NO.	PCL3519M								
SPEC.	35T974Y870								
HP	3								
VOLTS	230								
AMP	12.5								
RPM	3450								
FRAME	56C		HZ	60		PH	1		
SER.F.	1.15	CODE	G	DES	L	CL	F		
NEMA-NOM-EFF	85.5	PF	95						
RATING	40C AMB-CONT								
CC									
DE	6205	ODE	6203						
ENCL	TEFC	SN							

Parts List

Part number	Description	Quantity
SA111045	SA 35T974Y870	1.000 ea
RA102424	RA 35T974Y870	1.000 ea
OC3035F09SP	CYL OIL CAP 35MFD/370V	1.000 ea
TPBRT44DB	THERMAL 1PH 1.25 MAN 120C	1.000 ea
EC1216C06SP	ELEC CAP, 216-259 MFD, 250V, 2.06D X 4.	1.000 ea
WD3006A01	RSS-2-103JT 2W 10K RES. METAL OXIDE 5%	1.000 ea
TP5059	GENERIC WELDED THERMAL, 7" LEAD KIT	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3008A16	35 CB .50 NPT @ 6:00, 1.25 MTO @ 3:00	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HA6015A09	THERMAL RETAINER PLATED	1.000 ea
51XB1214A10	12-14 X 5/8HX WS SL SR TYBX	2.000 ea
NS2500A03	SPL THERMAL INSULATOR FOR 1.25 THERMAL	1.000 ea
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
NS2501A02	INSULATOR, CAPACITOR BOX	1.000 ea
35CB3801	CAPACITOR COVER, CAST	1.000 ea
34GS3002	GASKET, CAPACITOR BOX	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
HA7010	CAPACITOR RETENTION CLAMP	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea

HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1087	LABEL,MANUAL RESET (ROLL LABEL)	1.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	4.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FH4005A32	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
SP5181A28	MODEL 35 LC TORQ STAT SWITCH LEAD ASSY	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0002	CONNECTION LABEL	1.000 ea
NP1257L	ALUM UL CC THERMAL REV MTG	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 10351

Typical performance - not guaranteed values

Winding: 35WGY870-R001			Type: 3532LC		Enclosure: TEFC			
Nameplate Data			230 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		3	Full Load Torque		4.6 LB-FT			
Volts		230	Start Configuration		direct on line			
Full Load Amps		12.5	Breakdown Torque		11.5 LB-FT			
R.P.M.		3450	Pull-up Torque		9.3 LB-FT			
Hz		60	Phase		1	Locked-rotor Torque	10.5 LB-FT	
NEMA Design Code		L	KVA Code		G	Starting Current		77 A
Service Factor (S.F.)		1.15	No-load Current		2.6 A			
NEMA Nom. Eff.		85.5	Power Factor		95	Line-line Res. @ 25°C		3.06 Ω A Ph 1.45 Ω B Ph
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		47°C	
S.F. Amps			Temp. Rise @ S.F. Load		56°C			

Load Characteristics 230 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	76	87	92	92	93	92	93
Efficiency	72	80	85	85.5	82	78.5	85
Speed	3565	3540	3510	3475	3430	3370	3455
Line amperes	4.6	7.2	9.6	12.5	16	19.9	14.4

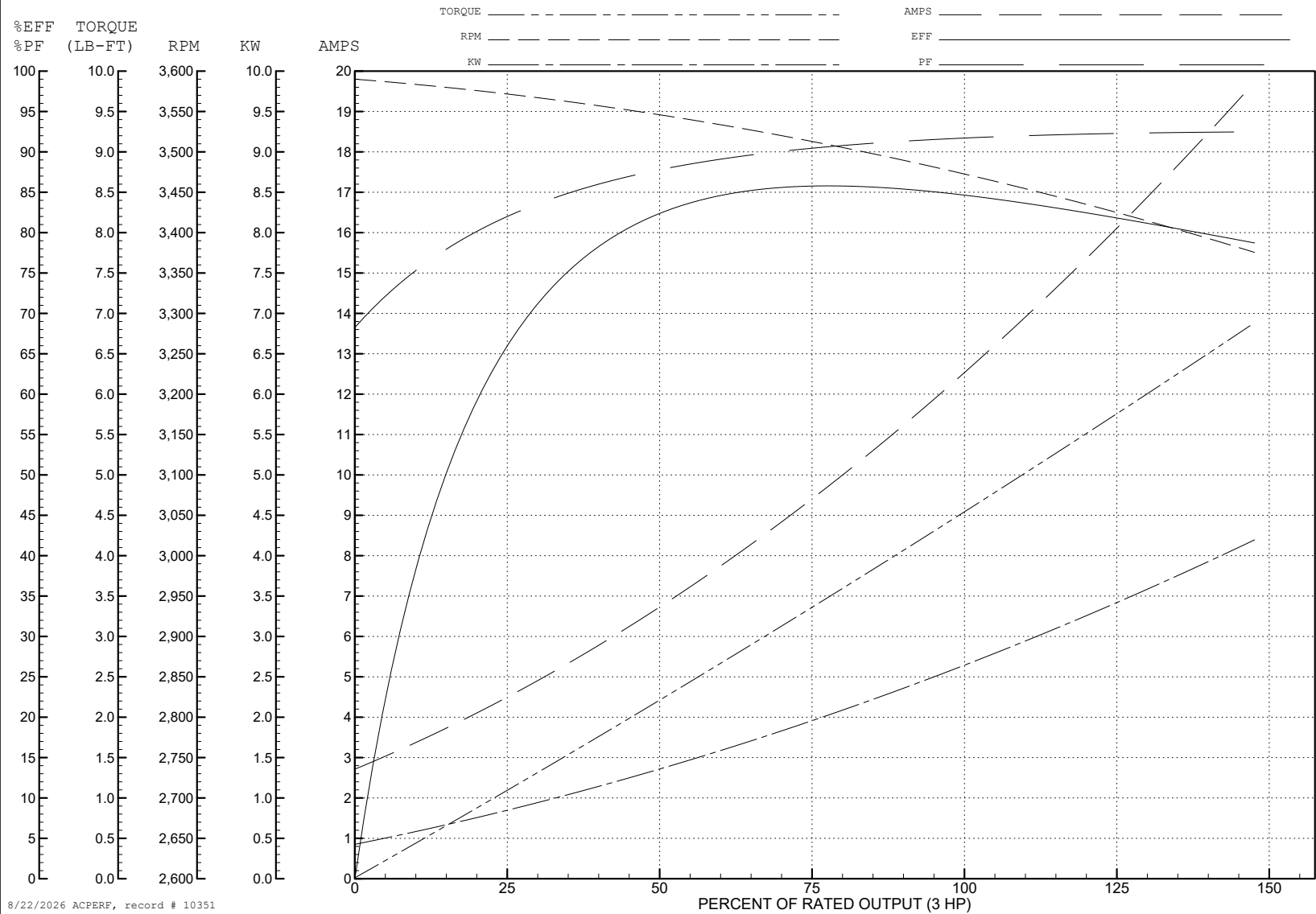
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WINDING # 35WGY870

Typical performance - not guaranteed values.

3 HP 1 PH 60 HZ 3450 RPM 230 V 3532LC

TORQUES (LB-FT): PO=11.5 PU=9.3 LR=10.5 LRA=77



AC Induction Motor Performance Data

Record # 38571

Typical performance - not guaranteed values

Winding: 35WGY870-R001			Type: 3532LC		Enclosure: TEFC		
Nameplate Data			230 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		3	Full Load Torque		4.65 LB-FT		
Volts		230	Start Configuration		direct on line		
Full Load Amps		12.5	Breakdown Torque		10.4 LB-FT		
R.P.M.		3450	Pull-up Torque		8.29 LB-FT		
Hz	60	Phase	1	Locked-rotor Torque		10.7 LB-FT	
NEMA Design Code		L	KVA Code	G	Starting Current		79.3 A
Service Factor (S.F.)		1.15		No-load Current		1.97 A	
NEMA Nom. Eff.		85.5	Power Factor	95	Line-line Res. @ 25°C		0.80257 Ω A Ph 1.4763 Ω B Ph
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		104°C	
S.F. Amps				Temp. Rise @ S.F. Load		136°C	

Load Characteristics 230 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	95	98	100	100	99	98	99
Efficiency	66.4	76.2	79.4	78.2	74.4	67.8	75.9
Speed	3553.8	3518.2	3479.4	3428.6	3362.2	3254.4	3389
Line amperes	4.09	6.62	9.37	12.7	16.6	22.2	15

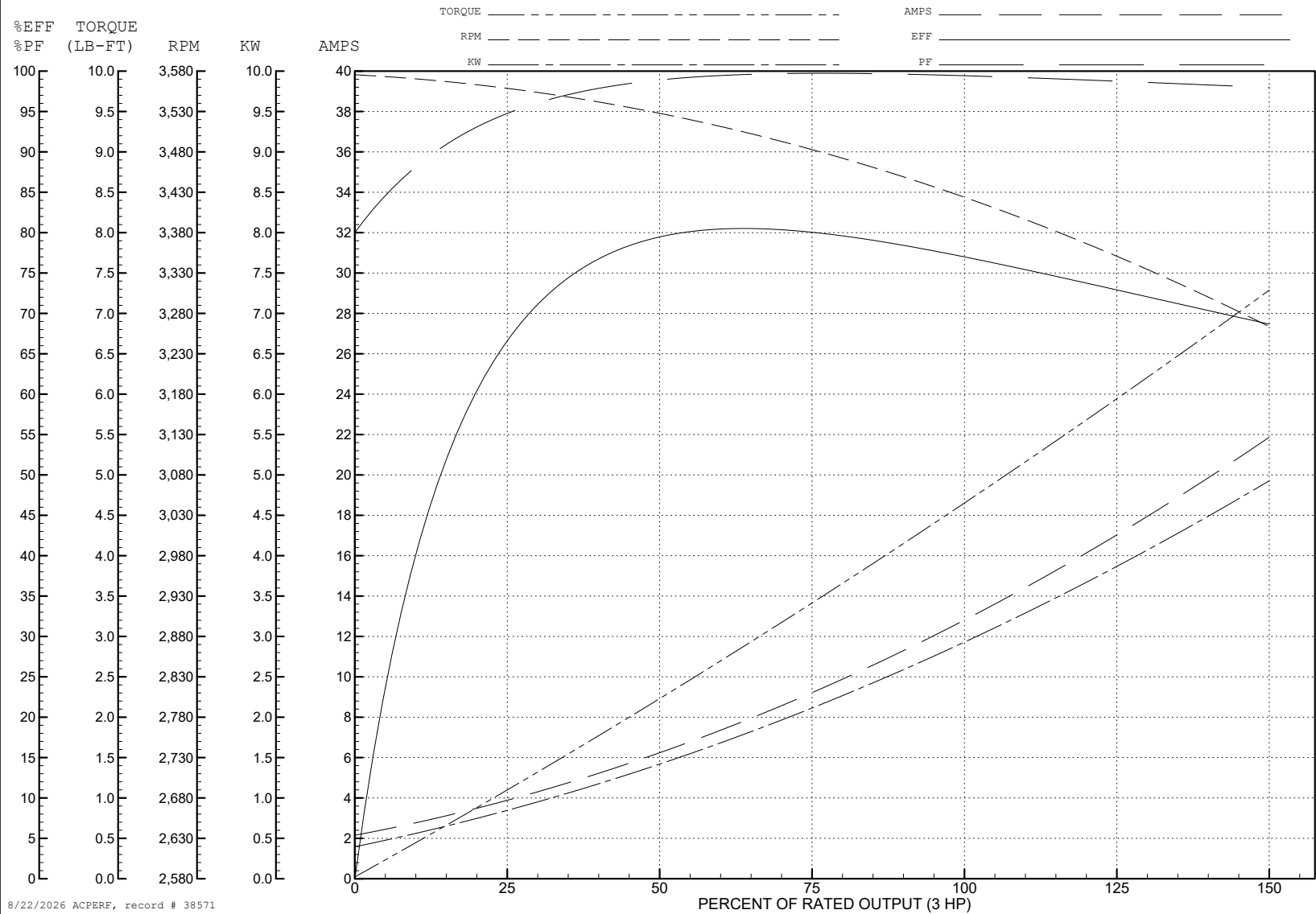
ABB Motors and Mechanical Inc.

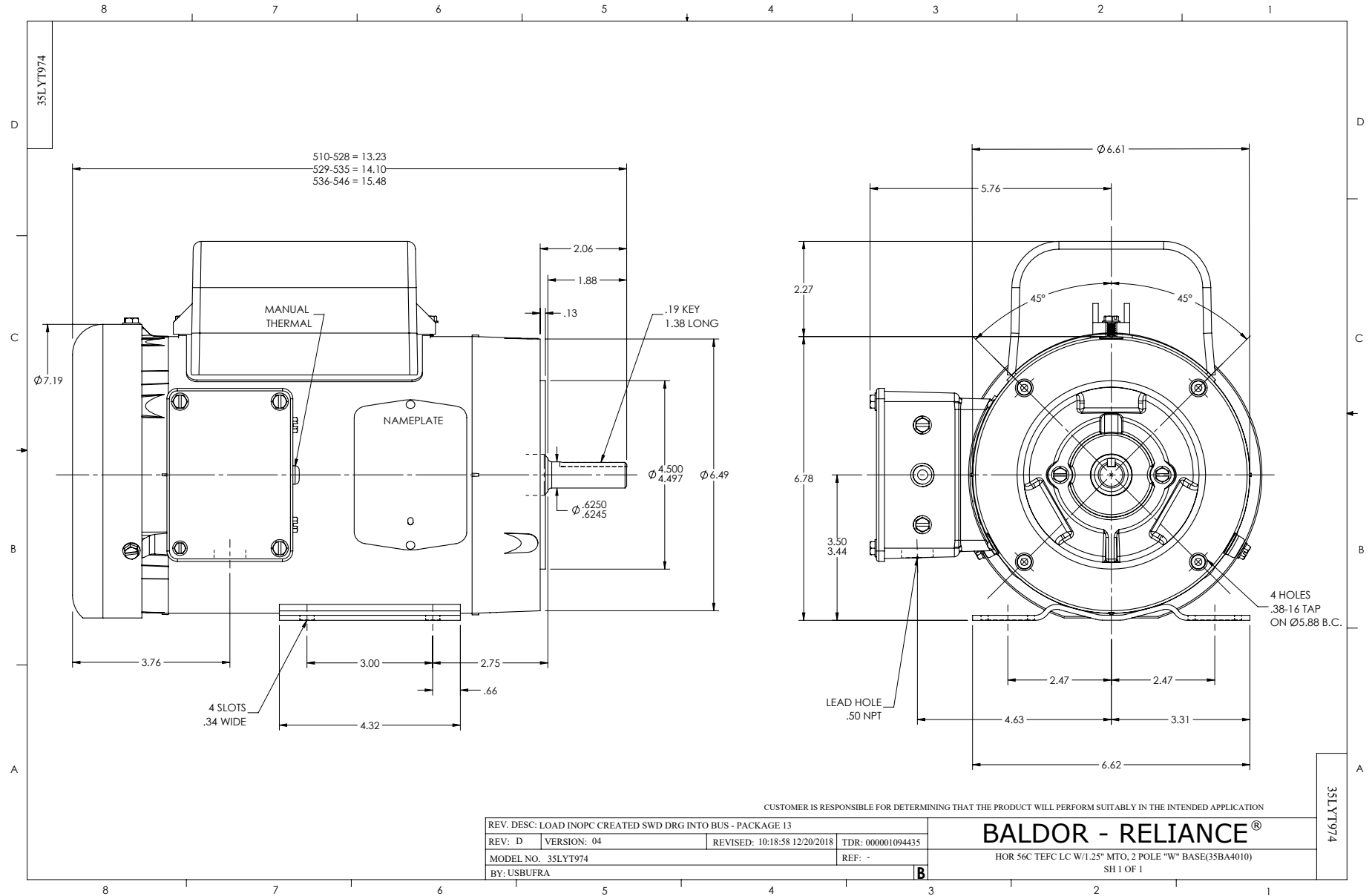
WINDING # 35WGY870

Typical performance - not guaranteed values.

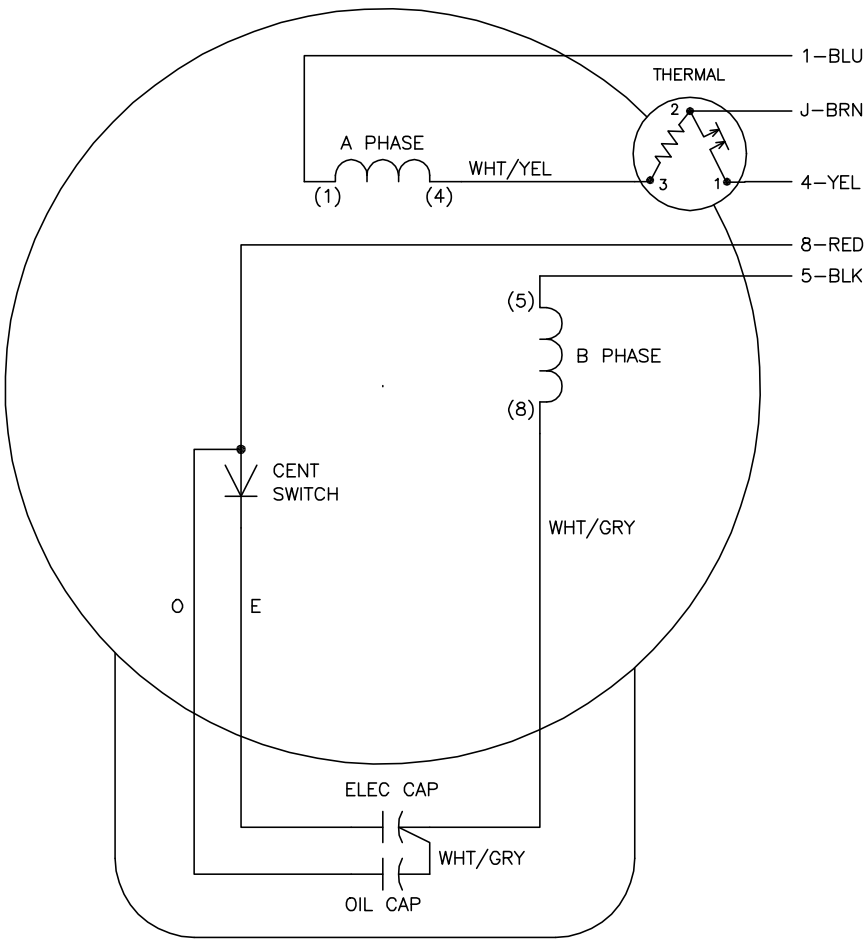
3 HP 1 PH 60 HZ 3450 RPM 230 V 3532LC

TORQUES (LB-FT): PO=10.4 PU=8.29 LR=10.7 LRA=79.3





CD0002A02



	LINE A	LINE B	JOIN
STD	1,8	4	J,5
OPP	1,5	4	J,8

- NOTES:
- 1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
 - 2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
 - 3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REMOVE 2-TERMINAL THERMAL DETAIL, SEE CD0002A04		
REV. LTR: D	VERSION: 01	TDR: 000000360649
CD0002A02	FILE: \AAA\00007\520	REVISED: 17:11:40 04/15/2005
	MTL: -	BY: ENJOEP0

BALDOR ELECTRIC Co.

TYPE LC, SV, REV, THERMAL, 5 LEADS

CD0002A02