ABB BALDOR RELIANCE

Customer information packet

CFSWDM3537-5E

.5HP, 3500RPM, 3PH, 60HZ, 56C, 3516M, TENV, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
Frame	56C
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 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	.600 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
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	0.6 a
Insulation Class	H
Inverter Code	Not Inverter

Part Detail

Revision	M
Type	AC
Mech. spec.	35E4735
Base	
Status	PRD/A
Elec. spec.	35WGN872
Layout	35LYE4735
Eff. date	09-09-2026
CD Diagram	CD0006
Poles	02
Leads	3#18 15" LEAD LENGTH,0#0 DBL DIP & BAKE,0#0 PHASE INSULAY
Proprietary	False
Created date	03-16-2018

KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	@ 0 AWG
	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.78 IN
Power Factor	84
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
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	3500 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4427ALA02											
CAT #	CFSWDM3537-5E			**WT**		**LBS**					
SPEC	35E4735N872G1			**ENCL**	TENV						
SER #				**CC**	010A	**IP**	69				
HP	.5			**MAG CUR**	.32						
VOLTS	575					**NEMA NOM. EFF**	84				
AMPS	.6					**PF**	84				
RATING	40C AMB-CONT										
RPM	3500				**MAX RPM**	5400					
FRAME	56C	**HZ**	60	**CODE**	N	**CLASS**	H				
SER.F.	1.15	**SF AMP**	.62			**PH**	3	**DES**	B		
DE	6205			**ODE**	6205						
LUBRICATION	POLYREX EM										
ID LOGO		**INVERTER TYPE**		**VPWM**		**CHP**	60	**TO**	90	1.5:1	
ID LOGO	**WK2**	0.036	**CT**	15	**TO**	60		4:1			
ID LOGO	**SL HZ**	1.7	**VT**	3	**TO**	60		20:1			
									QR		
YR											

Parts List

Part number	Description	Quantity
SA353335	SA 35E4735N872G1	1.000 ea
RA342142	RA 35E4735N872G1	1.000 ea
35CB1017A01	35/36 MID SECT - 3 PC. CONDUIT BOX 1/2 N	1.000 ea
HA3424S48	STUD - M6X1.0 THDS X 3.00"	1.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
11XW1032G08	10-32 X .50, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
35EP1940A03	FRONT TENV 205 BRG (STAINLESS)	1.000 ea
RM1070A25	O-RING, VITON/FKM .070CS X 6.190ID	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
RM1070A26	O-RING,4.5MM I.D.X1.5MM C.S. (VITON)	4.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
RM1006A03	GROMMET, #2867 1.12 HOLE (ATLANTIC INDIA	1.000 ea
35EP1935A02	PULLEY 56C/143-5TC ENCL 205 BRG	1.000 ea
RM1070A25	O-RING, VITON/FKM .070CS X 6.190ID	1.000 ea
HW4600G01	.984X1.499X.25 VITON SLICK SERIES LIP	1.000 ea
HW4600E99	25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V	1.000 ea
HW5002A103	RET RING N5002-206 WALDES KOHINOOR	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
35CB1513A01	35-36-37 MACH. LID - 3 PC. CONDUIT BOX	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.005 qt
MJ5004A93	FOOD GRADE (H1 RATED) ANTISEIZE THRD COM	0.005 ea
HA1025A21	WSHR,FELT .125" THK	1.000 ea
HA5027A09	DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
WD5603A01	KIT, CLOSED-END LEAD SPLICE (18-14GA)	1.000 ea
HA3100FS11	THRUBOLT, 10-32 X 8.500 SS FOOD SAFE	4.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000010	ZRTG PE ASSEMBLY	1.000 ea
FE-0000007	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 41246
Typical performance - not guaranteed values

Winding: 35WGN872-R001	**Type:** 3516M	**Enclosure:** TENV

Nameplate Data			
Rated Output (HP)			.5
Volts			575
Full Load Amps			.6
R.P.M.			3500
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	84	**Power Factor**	84
Rating - Duty			40C AMB-CONT
S.F. Amps			

575 V, 60 Hz: Single Voltage Motor	
Full Load Torque	0.758 LB-FT
Start Configuration	direct on line
Breakdown Torque	3.91 LB-FT
Pull-up Torque	1.65 LB-FT
Locked-rotor Torque	3.18 LB-FT
Starting Current	5.93 A
No-load Current	0.323 A
Line-line Res. @ 25ºC	39.4 Ω
Temp. Rise @ Rated Load	46°C
Temp. Rise @ S.F. Load	52°C
Locked-rotor Power Factor	55
Rotor inertia	0.0443 LB-FT2

Load Characteristics 575 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	41	60	72	80	85	88	83
Efficiency	71.9	80.2	83.3	84.6	84.7	84	84.7
Speed	3573	3552	3528	3502	3477	3449	3487
Line amperes	0.347	0.398	0.47	0.56	0.657	0.763	0.618

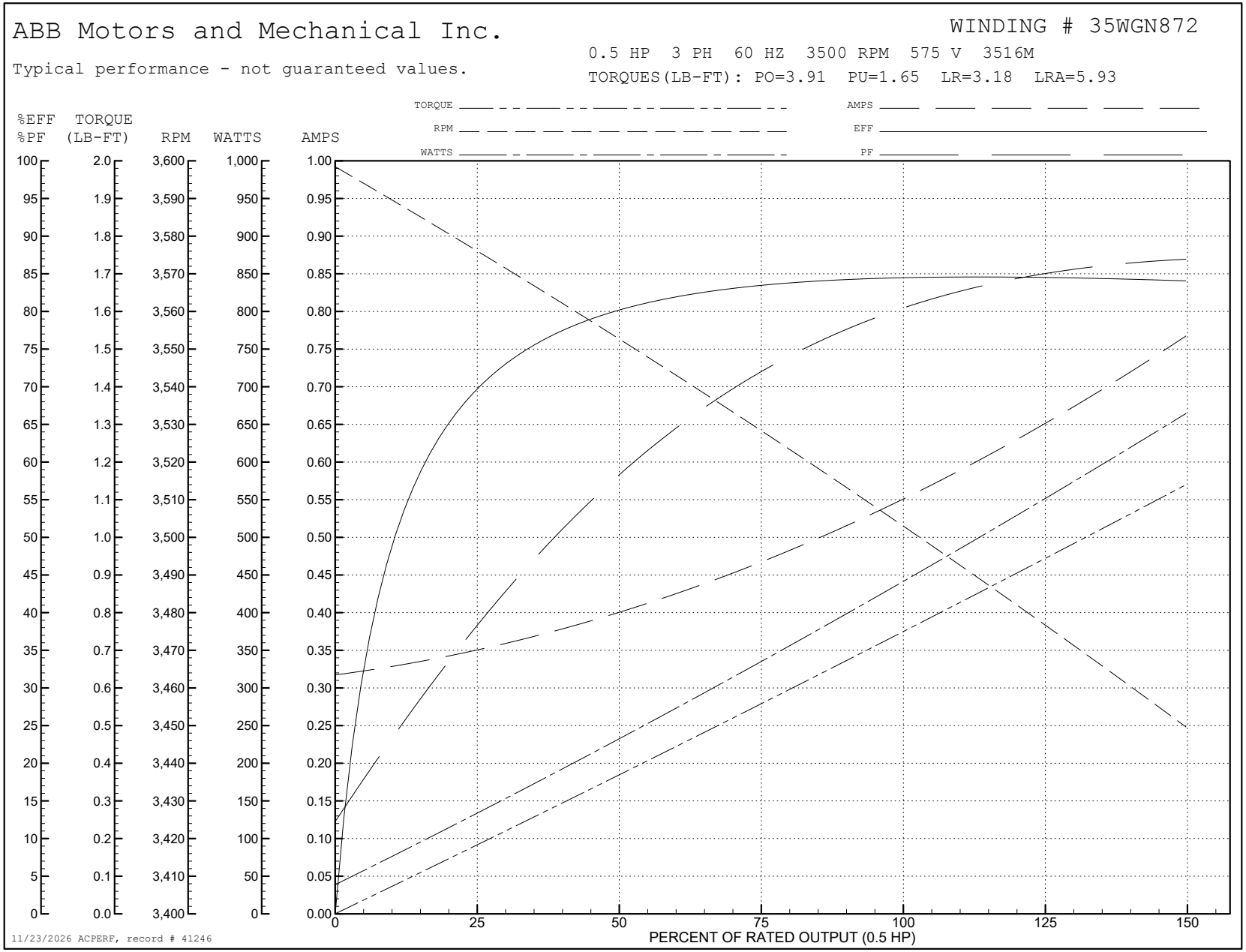
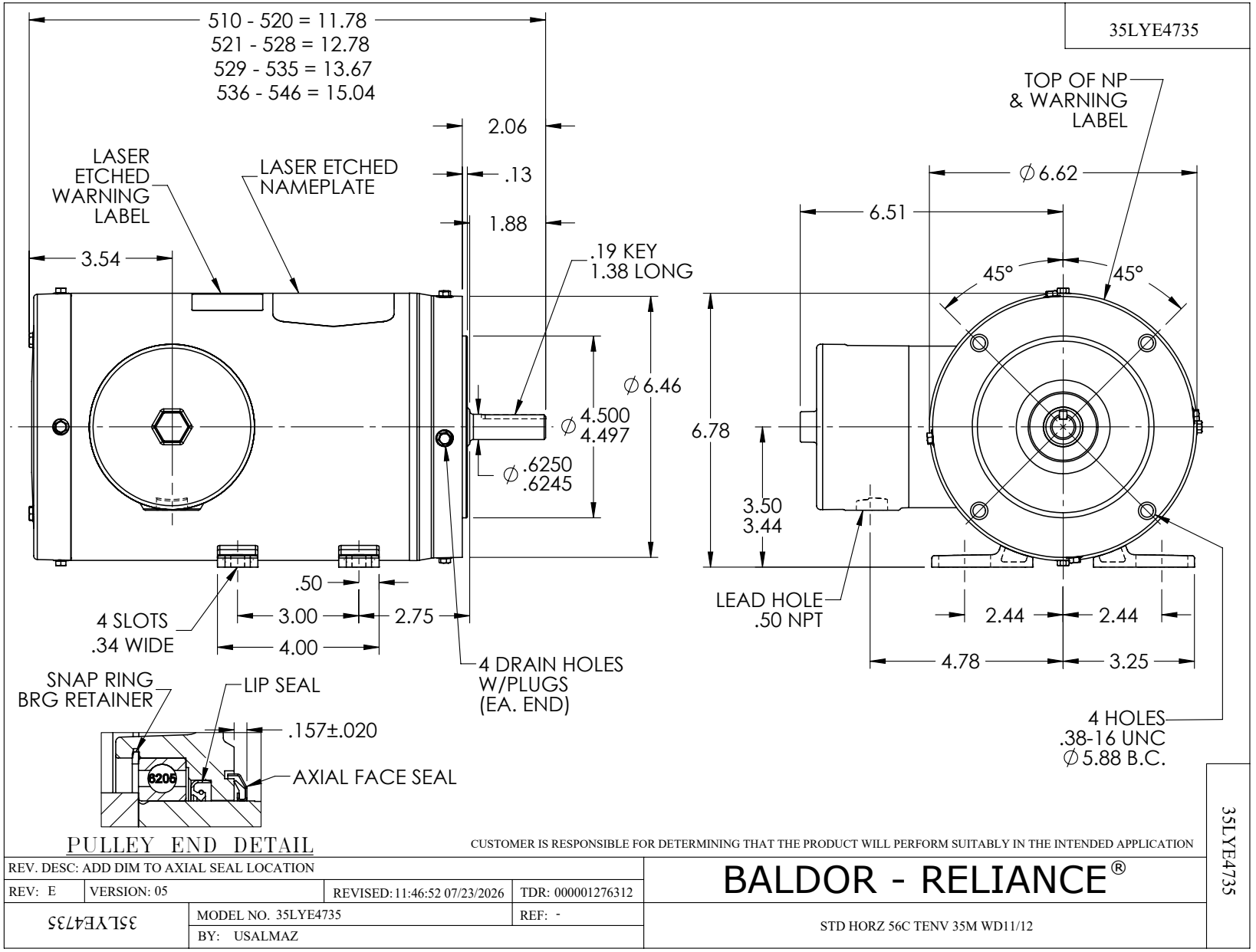
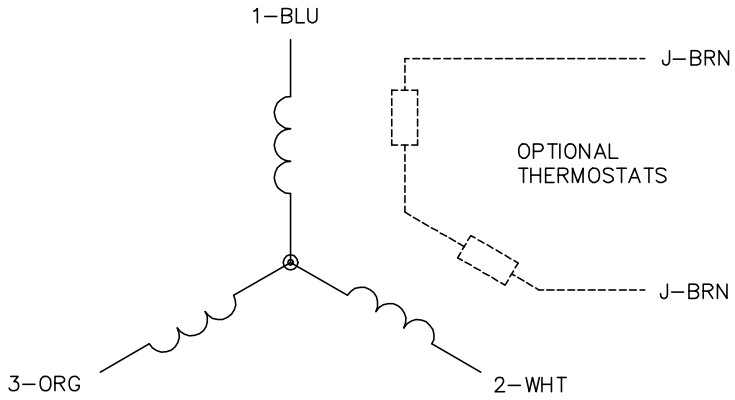


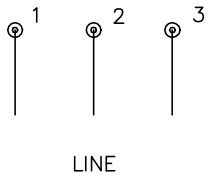
ABB Motors and Mechanical Inc.
WINDING # 35WGN872
Typical performance - not guaranteed values.
0.5 HP 3 PH 60 HZ 3500 RPM 575 V 3516M
TORQUES(LB-FT): PO=3.91 PU=1.65 LR=3.18 LRA=5.93
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0
2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0
3,600 3,590 3,580 3,570 3,560 3,550 3,540 3,530 3,520 3,510 3,500 3,490 3,480 3,470 3,460 3,450 3,440 3,430 3,420 3,410 3,400
1,000 950 900 850 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 50 0
1.00 0.95 0.90 0.85 0.80 0.75 0.70 0.65 0.60 0.55 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.10 0.05 0.00
0 25 50 75 100 125 150
PERCENT OF RATED OUTPUT (0.5 HP)
11/23/2026 ACPERF, record # 41246


35LYE4735
510 - 520 = 11.78
521 - 528 = 12.78
529 - 535 = 13.67
536 - 546 = 15.04
2.06
.13
1.88
LASER ETCHED WARNING LABEL
LASER ETCHED NAMEPLATE
3.54
.19 KEY 1.38 LONG
∅6.46
∅4.500 4.497
∅.6250 .6245
.50
3.00
2.75
4.00
4 SLOTS .34 WIDE
4 DRAIN HOLES W/PLUGS (EA. END)
SNAP RING BRG RETAINER
LIP SEAL
.157±.020
AXIAL FACE SEAL
6206
PULLEY END DETAIL
TOP OF NP & WARNING LABEL
∅6.62
6.51
45°
45°
6.78
3.50 3.44
LEAD HOLE .50 NPT
2.44
2.44
4.78
3.25
4 HOLES .38-16 UNC ∅5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD DIM TO AXIAL SEAL LOCATION
REV: E
VERSION: 05
REVISED: 11:46:52 07/23/2026
TDR: 000001276312
BALDOR - RELIANCE®
35LYE4735
MODEL NO. 35LYE4735
REF: -
BY: USALMAZ
STD HORZ 56C TENV 35M WD11/12
35LYE4735

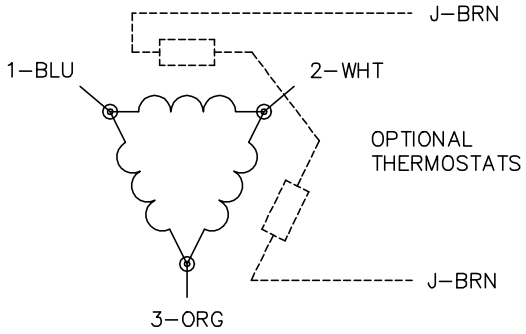
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1