ABB BALDOR RELIANCE

Customer information packet

VNM3537

.5HP, 3450RPM, 3PH, 60HZ, 56C, 3516M, TENV, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
Frame	56C
Frame Material	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	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CURUS
	C UR US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	.800 A @ 460.0 V
	1.600 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
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	0.8 a

Part Detail

Revision	X
Type	AC
Mech. spec.	35E010
Base	
Status	PRD/A
Elec. spec.	35WGQ246
Layout	35LYE010
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-08-2008

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.06 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
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	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1256L											
CAT.NO.	VNM3537										
SPEC.	35E010Q246G1										
HP	.5										
VOLTS	230/460										
AMP	1.6/.8										
RPM	3450										
FRAME	56C		**HZ**	60			**PH**	3			
SER.F.	1.25	**CODE**	N	**DES**	B	**CLASS**	F				
NEMA-NOM-EFF	77	**PF**	81								
RATING	40C AMB-CONT										
CC											
DE	6205		**ODE**	6203							
ENCL	TENV	**SN**									
	SFA 1.8/.9										

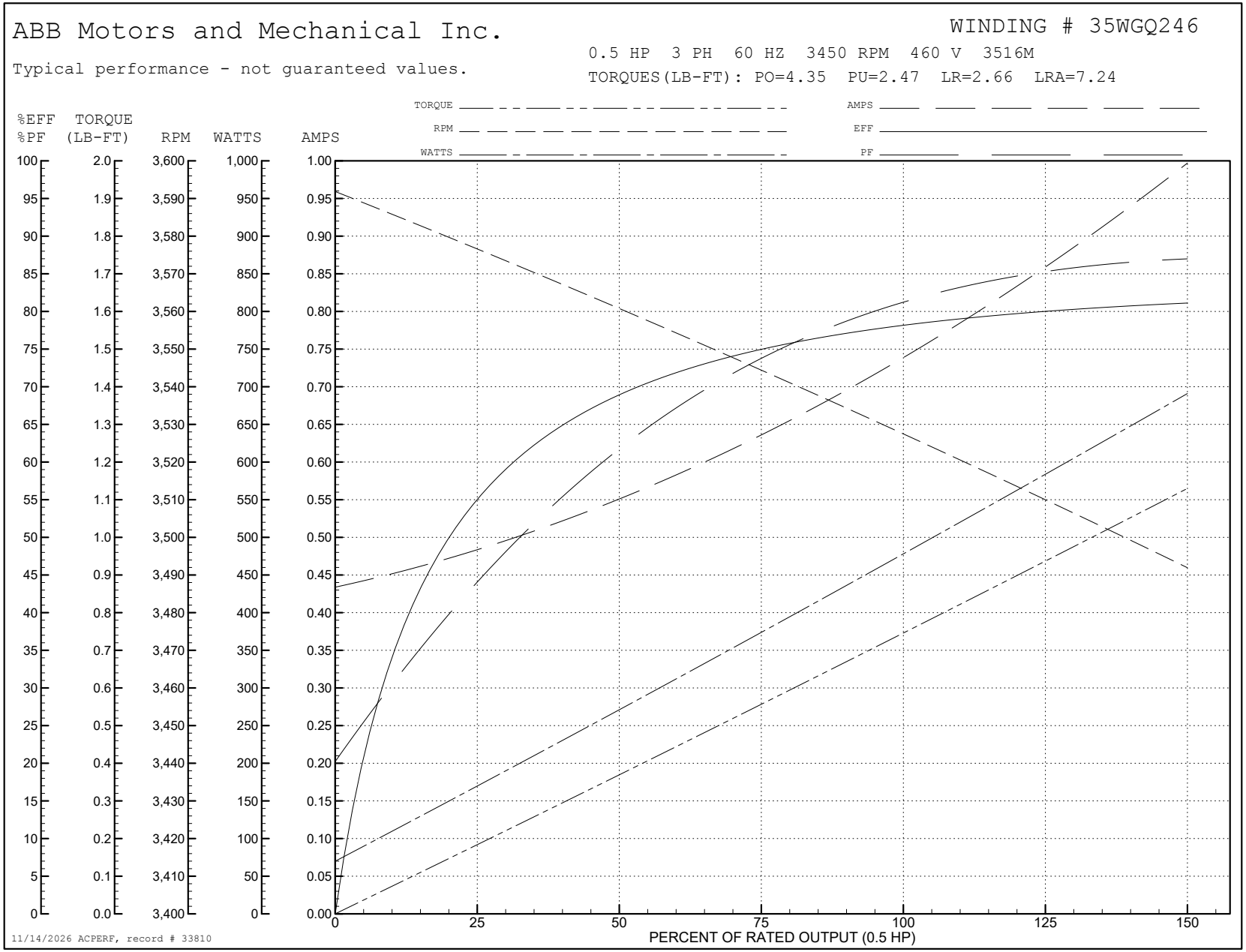
AC Induction Motor Performance Data
Record # 33810
Typical performance - not guaranteed values

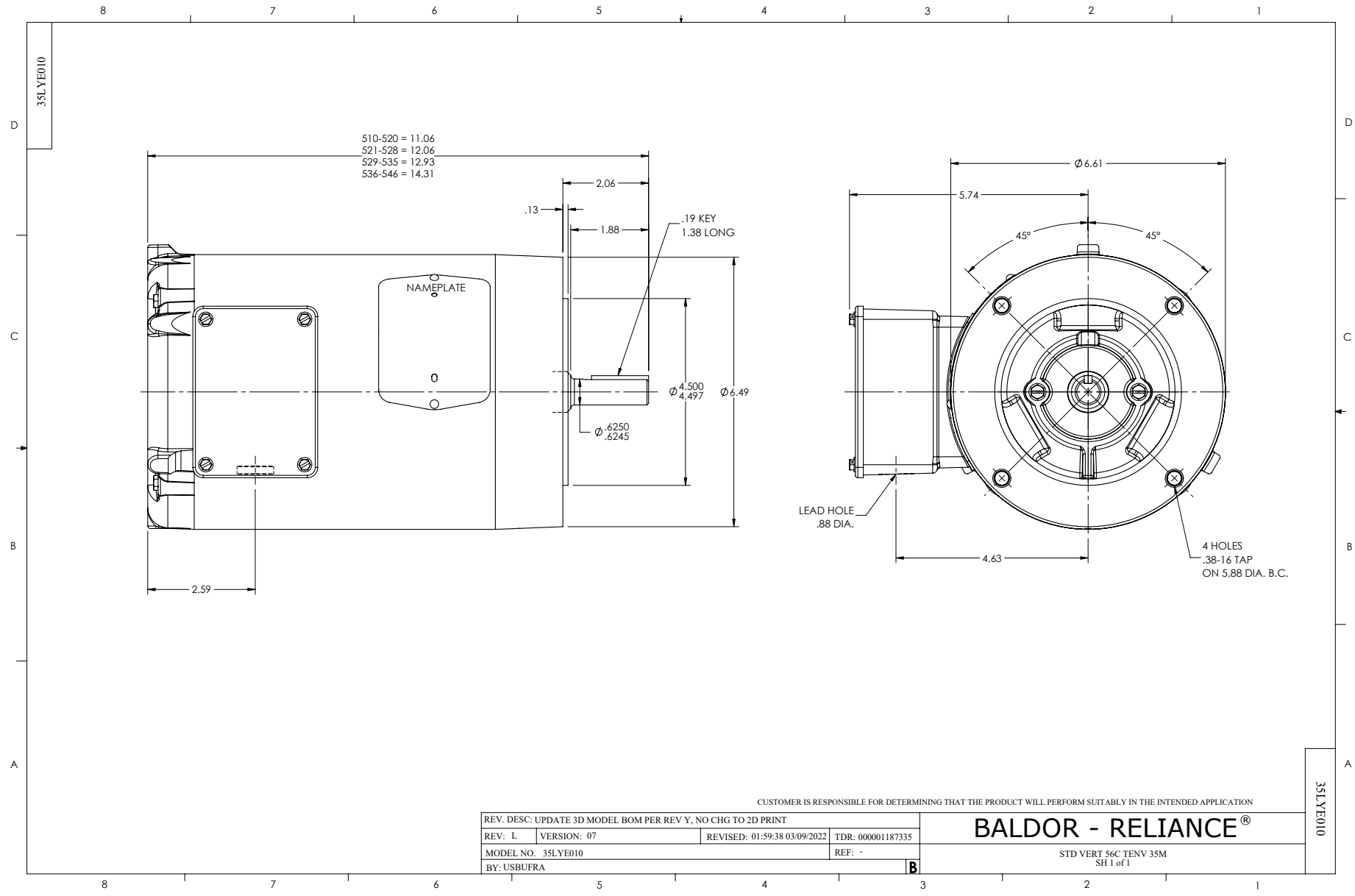
Winding: 35WGQ246-R002	**Type:** 3516M	**Enclosure:** TENV

Nameplate Data			**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		.5	**Full Load Torque**	0.746 LB-FT
Volts		230/460	**Start Configuration**	direct on line
Full Load Amps		1.6/.8	**Breakdown Torque**	4.35 LB-FT
R.P.M.		3450	**Pull-up Torque**	2.47 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	2.66 LB-FT
NEMA Design Code	B **KVA Code**	N	**Starting Current**	7.24 A
Service Factor (S.F.)		1.25	**No-load Current**	0.442 A
NEMA Nom. Eff.	77 **Power Factor**	81	**Line-line Res. @ 25ºC**	23 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	32°C
S.F. Amps		1.8/.9	**Temp. Rise @ S.F. Load**	37°C

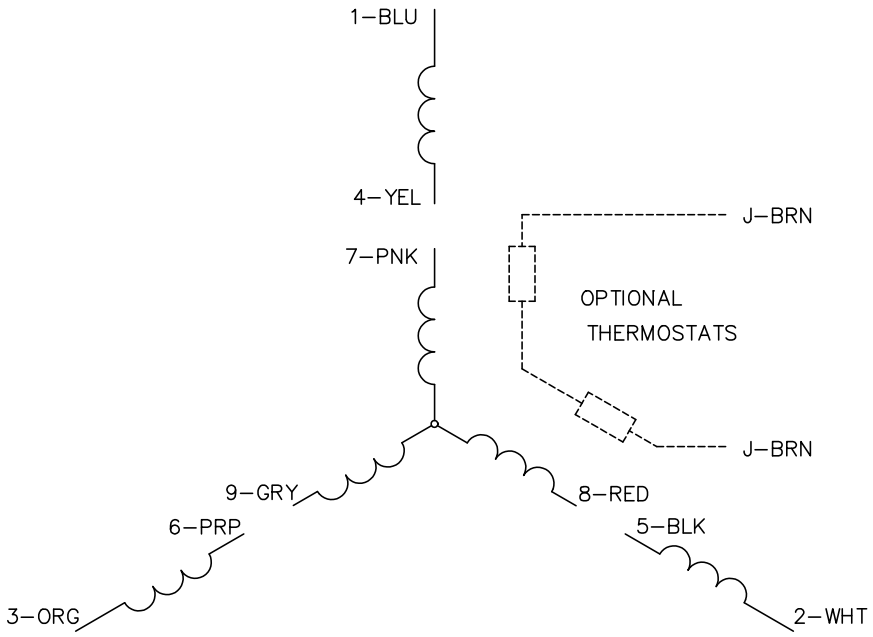
Load Characteristics 460 V, 60 Hz, 0.5 HP

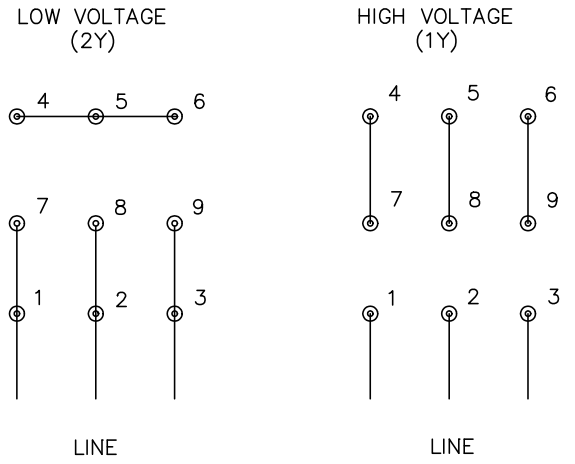
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	46	63	73	80	85	88	85
Efficiency	54.6	68.9	75	78.5	79.8	81.1	79.8
Speed	3576	3561	3544	3528	3510	3492	3510
Line amperes	0.475	0.545	0.637	0.746	0.863	0.99	0.863


ABB Motors and Mechanical Inc.
WINDING # 35WGQ246
Typical performance - not guaranteed values.
0.5 HP 3 PH 60 HZ 3450 RPM 460 V 3516M
TORQUES(LB-FT): PO=4.35 PU=2.47 LR=2.66 LRA=7.24
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)
11/14/2026 ACPERF, record # 33810


35LYE010
510-520 = 11.06
521-528 = 12.06
529-535 = 12.93
536-546 = 14.31
2.06
.13
1.88
.19 KEY
1.38 LONG
NAMEPLATE
Ø 4.500
4.497
Ø 6.49
Ø .6250
.6245
2.59
Ø 6.61
5.74
45°
45°
LEAD HOLE
.88 DIA.
4.63
4 HOLES
.38-16 TAP
ON 5.88 DIA. B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV Y, NO CHG TO 2D PRINT
REV: L
VERSION: 07
REVISED: 01:59:38 03/09/2022
TDR: 000001187335
MODEL NO. 35LYE010
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD VERT 56C TENV 35M
SH 1 of 1
35LYE010

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS