

ABB BALDOR RELIANCE III

Customer information packet

VBL3510T

1HP, 1740RPM, 1PH, 60HZ, 143TC, 3526LC, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143TC
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	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA UR
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	9.250 A @ 115.0 V 4.650 A @ 230.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	4.7 a
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	35E692
Base	
Status	PRD/A
Elec. spec.	35WGG241
Layout	35LYE692
Eff. date	05-05-2025
CD Diagram	CD0055
Poles	04
Leads	6#18
Proprietary	False
Created date	08-01-2022

Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3526LC
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.86 IN
Power Factor	85
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	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1740 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.	VBL3510T								
SPEC.	35E692G241								
HP	1								
VOLTS	115/230								
AMP	9.25/4.65								
RPM	1740								
FRAME	143TC		HZ	60			PH	1	
SER.F.	1.25	CODE	J	DES	L	CLASS		F	
NEMA-NOM-EFF	80	PF	85						
RATING	40C AMB-CONT								
CC									
DE	6205		ODE	6203					
ENCL	TEFC	SN							
	SFA 11.4/5.7								

Parts List

Part number	Description	Quantity
SA407264	SA 35E692G241	1.000 ea
RA398763	RA 35E692G241	1.000 ea
OC3025F11	CYL OIL CAP 25MFD/370V	1.000 ea
EC1540A06SP	ELEC CAP, 540-648 MFD, 125V, 2.06D X 4.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3900T69	FREP ENCL 35M&L, 203 BRG, W/ GRSR, TAP F	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
35CB3801	CAPACITOR COVER, CAST	1.000 ea
HA7010	CAPACITOR RETENTION CLAMP	1.000 ea
34GS3002	GASKET, CAPACITOR BOX	1.000 ea
NS2501A02	INSULATOR, CAPACITOR BOX	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307D00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HA1014A02SP	SPL SPACER FOR FAN COVER MTD ON BRAKE	3.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	3.000 ea
BR1003A01	BRAKE RELEASE LEVER	1.000 ea
HW2501D08	KEY, 3/16 SQ X .875 AUTO	1.000 ea
35FN3002A01SP	EXFN, PLASTIC, 6.376 OD, .625 ID W/FLAT	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH5000A08	FAN COVER ASSY FOR BRAKE MTRS,W/ PRIMER	1.000 ea
12XF1032A06	10-32X3/8 TY F HEX HD SLT	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
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	4.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
76BK2100BPF	1-056-021-00-BPF BRAKE TDR# 79345	1.000 ea
84XN3816J28	HEX SOC HD, 3/8-16 X 1.75 LONG	2.000 ea
SP5181A01	MODEL 35 LC TORQ STAT SWITCH LEAD ASSY	1.000 ea
LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
LB1185	LABEL,BRAKE CONNECTION (ON ROLLS)	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
G7PA1000	PKG GRP, PRINT PK1034A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 88915

Typical performance - not guaranteed values

Winding: 35WGG241-R001				Type: 3526LC		Enclosure: TEFC	
Nameplate Data				230 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1		Full Load Torque		3.023 LB-FT	
Volts		115/230		Start Configuration		direct on line	
Full Load Amps		9.5/4.75		Breakdown Torque		7.77 LB-FT	
R.P.M.		1740		Pull-up Torque		6.11 LB-FT	
Hz	60	Phase	1	Locked-rotor Torque		9.4 LB-FT	
NEMA Design Code		L	KVA Code	K	Starting Current		36.9 A
Service Factor (S.F.)		1.25		No-load Current		2.41 A	
NEMA Nom. Eff.		80	Power Factor	85	Line-line Res. @ 25°C		2.835 Ω A Ph 1.4934 Ω B Ph
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C	
S.F. Amps		11.6/5.8		Temp. Rise @ S.F. Load		76°C	
				Locked-rotor Power Factor		96	

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	68	79	85	89	91	89
Efficiency	63.4	75.5	78.5	78.4	76.2	72.2	76.2
Speed	1784.3	1770.7	1755.4	1737.9	1715.6	1686.4	1716
Line amperes	2.62	3.14	3.89	4.83	5.98	7.41	5.98

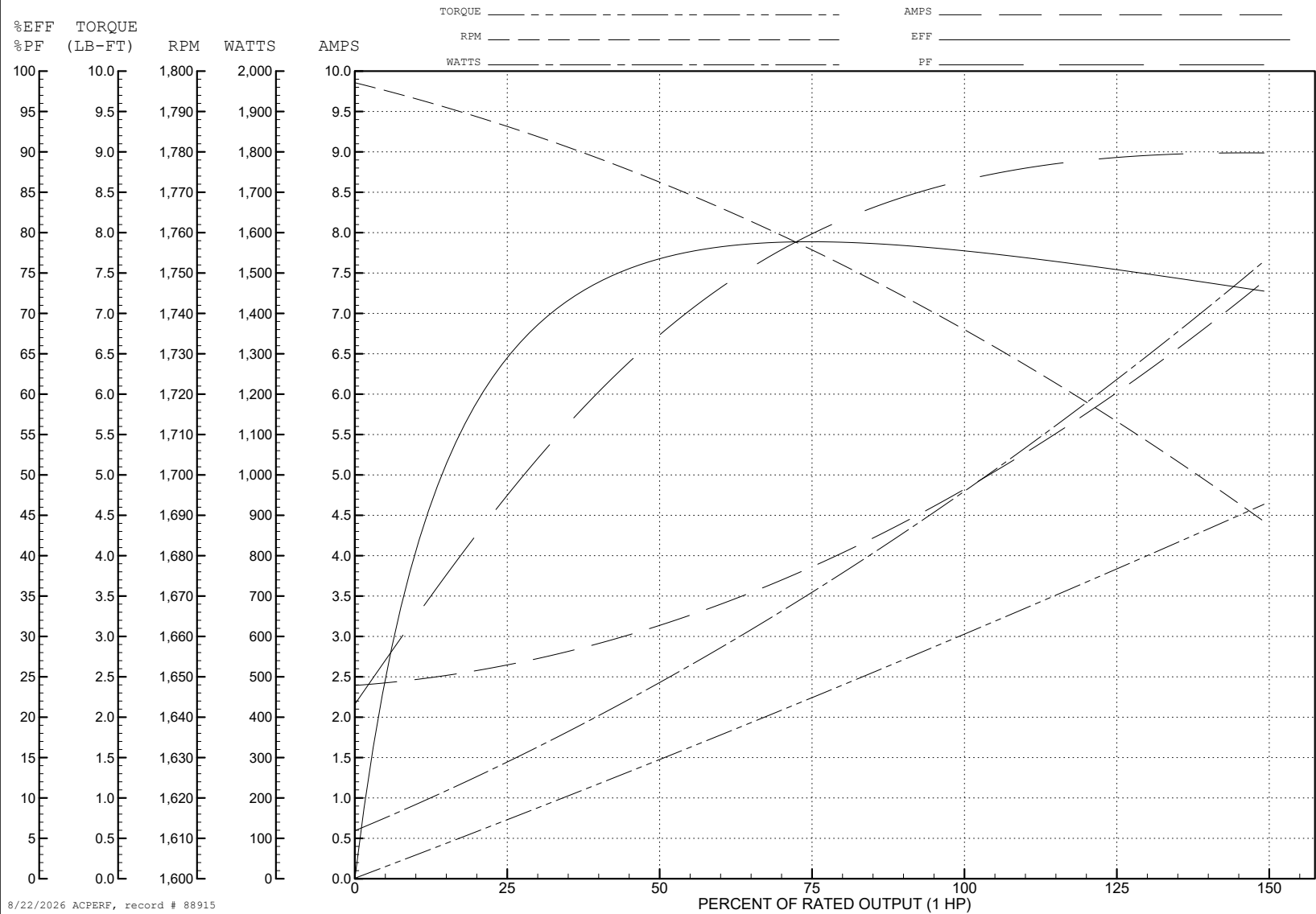
ABB Motors and Mechanical Inc.

WINDING # 35WGG241

Typical performance - not guaranteed values.

1 HP 1 PH 60 HZ 1740 RPM 230 V 3526LC

TORQUES (LB-FT): PO=7.77 PU=6.11 LR=9.4 LRA=36.9



CD0055

