ABB BALDOR RELIANCE

Customer information packet

VRBM3561T

3HP, 1710RPM, 3PH, 60HZ, 145TC, 3540M, TEFC, F1
Class - None
Division - Not Applicable

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11/17/2026 3:42:13 AM

Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Aluminum
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UR
	CSA
Ambient Temperature	40 °C
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	8.800 A @ 208.0 V
	8.200 A @ 230.0 V
	4.100 A @ 460.0 V
Design Code	D
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	4.1 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	J
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Standards	NEMA

Part Detail

Revision	E
Type	AC
Mech. spec.	75J035
Base	
Status	PRD/A
Elec. spec.	35WGG299
Layout	75LYJ035
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	03-11-2022

Motor Type	3540M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.68 IN
Power Factor	80
Product Family	General Purpose
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1710 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1256L									
CAT.NO.	VRBM3561T								
SPEC.	75J035G299G1								
HP	3								
VOLTS	230/460								
AMP	8.2/4.1								
RPM	1710								
FRAME	145TC	**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	J	**DES**	D	**CLASS**	F		
NEMA-NOM-EFF	84	**PF**	80						
RATING	40C AMB-CONT								
CC									
DE	6205	**ODE**	6205						
ENCL	TEFC	**SN**							
	SFA 9.4/4.7								

AC Induction Motor Performance Data
Record # 86941
Preliminary Data Sheet

Winding: 35WGG299-R001	**Type:** 3540M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			3	**Full Load Torque**	9.18 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			8.2/4.1	**Breakdown Torque**	34.8 LB-FT
R.P.M.			1710	**Pull-up Torque**	27.3 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	30.8 LB-FT
NEMA Design Code	D	**KVA Code**	J	**Starting Current**	30 A
Service Factor (S.F.)			1.15	**No-load Current**	2.25 A
NEMA Nom. Eff.	84	**Power Factor**	80	**Line-line Res. @ 25ºC**	5.66 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	87°C
S.F. Amps			9.4/4.7	**Temp. Rise @ S.F. Load**	107°C
				Locked-rotor Power Factor	59.7
				Rotor inertia	0.289 lb-ft²

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	37	58	71	79	83	86	82
Efficiency	80.8	86.4	87.1	85.8	83.7	80.9	84.1
Speed	1783	1765	1746	1721	1694	1662	1694
Line amperes	2.39	2.81	3.41	4.18	5.06	6.08	4.68

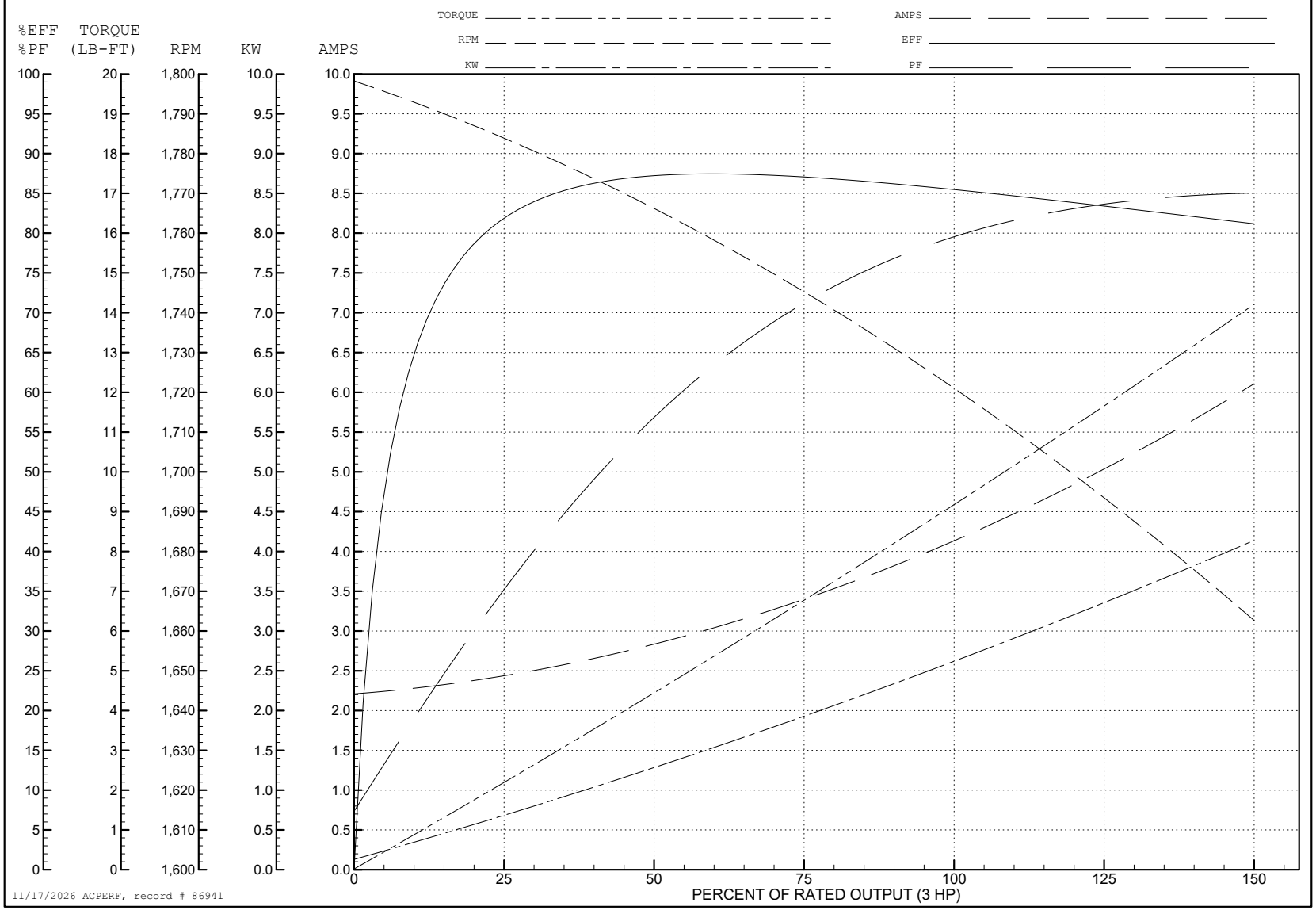
ABB Motors and Mechanical Inc.

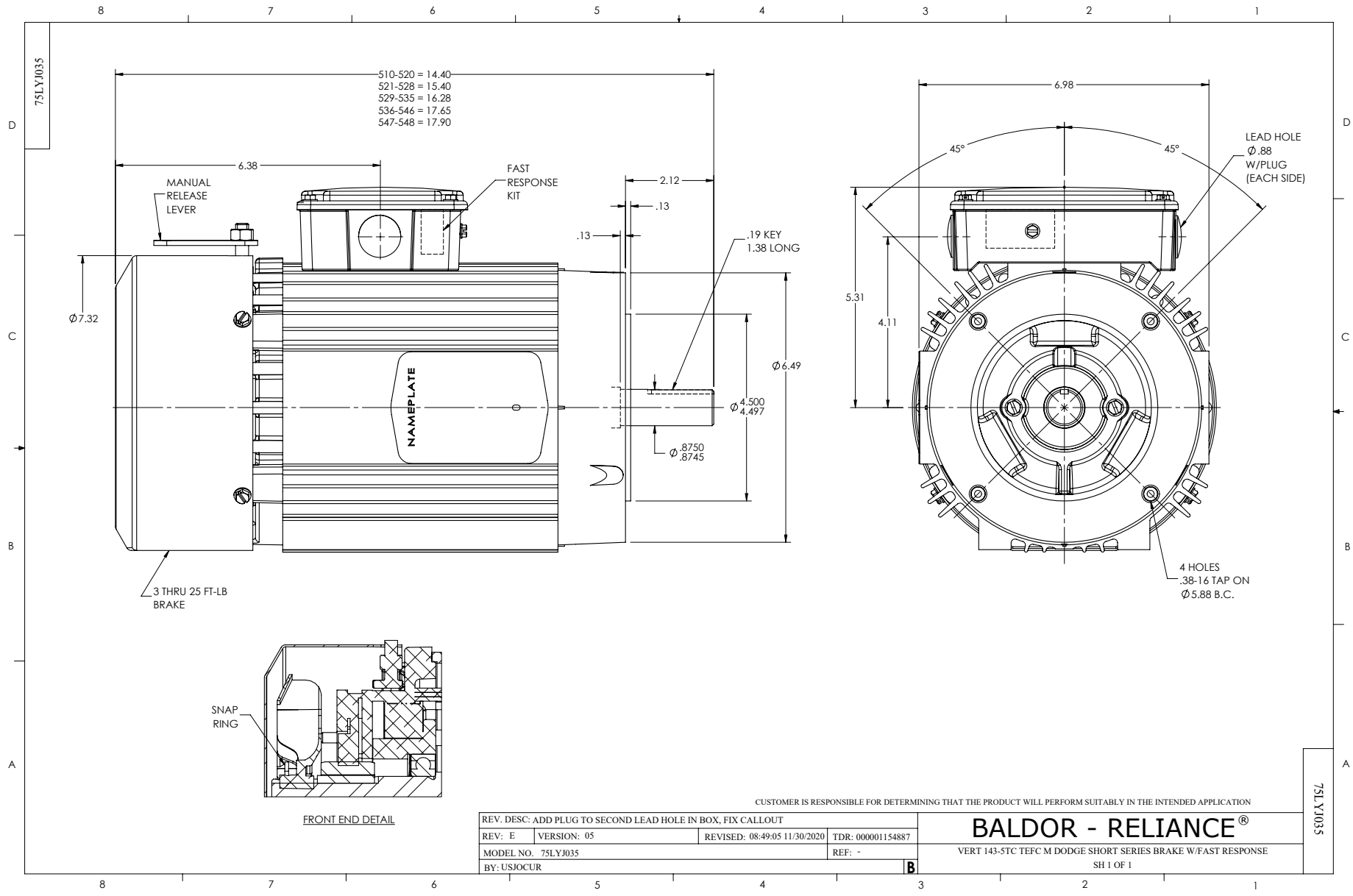
WINDING # 35WGG299

3 HP 3 PH 60 HZ 1710 RPM 460 V 3540M

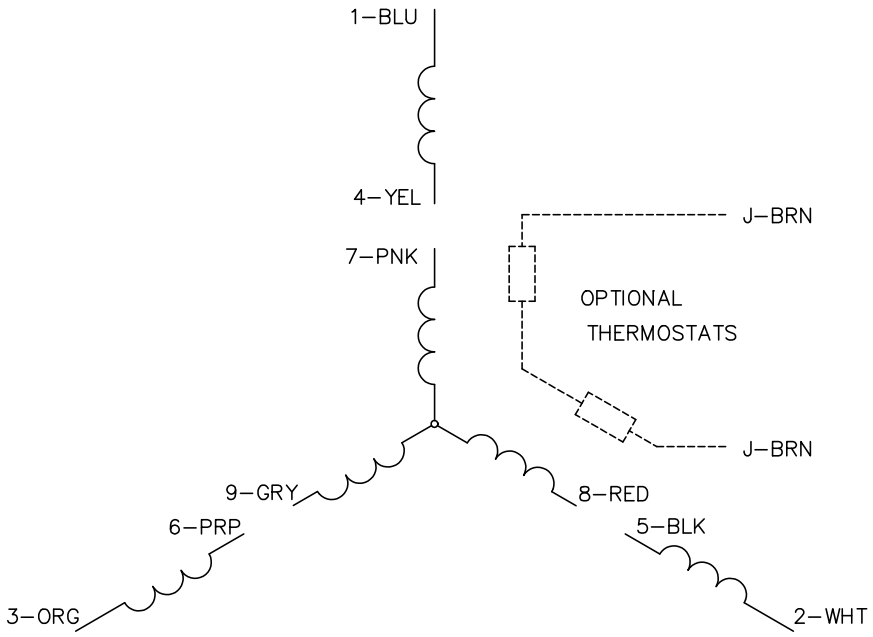
Typical performance - not guaranteed values.

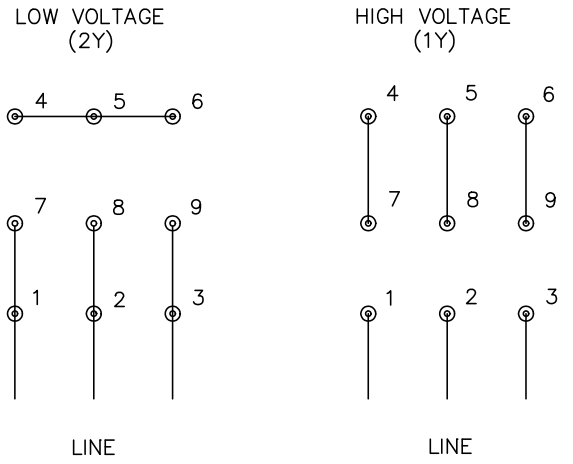
TORQUES(LB-FT): PO=34.8 PU=27.3 LR=30.8 LRA=30




75LYJ035
510-520 = 14.40
521-528 = 15.40
529-535 = 16.28
536-546 = 17.65
547-548 = 17.90
6.38
MANUAL RELEASE LEVER
FAST RESPONSE KIT
2.12
.13
.13
.19 KEY
1.38 LONG
Ø7.32
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.8750
.8745
3 THRU 25 FT-LB BRAKE
6.98
45°
45°
LEAD HOLE
Ø.88
W/PLUG
(EACH SIDE)
5.31
4.11
4 HOLES
.38-16 TAP ON
Ø5.88 B.C.
SNAP RING
FRONT END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD PLUG TO SECOND LEAD HOLE IN BOX, FIX CALLOUT
REV: E
VERSION: 05
REVISED: 08:49:05 11/30/2020
TDR: 000001154887
MODEL NO. 75LYJ035
REF: -
BY: USJOCUR
B
BALDOR - RELIANCE®
VERT 143-5TC TEFC M DODGE SHORT SERIES BRAKE W/FAST RESPONSE
SH 1 OF 1
75LYJ035

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