

ABB BALDOR RELIANCE III

Customer information packet

EM3613T-57

5HP, 2880RPM, 3PH, 50HZ, 184T, 3642M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184T
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ 400.0 V @ 50 HZ
Agency Approvals	CE CURUS IE3 UKCA WEEE C UR US
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	6.400 A @ 400.0 V 11.200 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	L
Type	AC
Mech. spec.	36A001
Base	
Status	PRD/A
Elec. spec.	36WGR595
Layout	36LYA001
Eff. date	05-20-2025
CD Diagram	CD0022
Poles	02
Leads	6#16
Proprietary	False
Created date	12-22-2015

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.4 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.04 IN
Power Factor	94
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2880 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

NP2716L									
CAT NO	EM3613T-57								
SPEC.	36A001R595G1								
HP	5/3.7KW						PH	3	
VOLTS	230/400								
AMP	11.2/6.4								
R.P.M. (1/MIN)	2880								
FRAME	184T		HZ		50		I.P.		44
SER.F.	1.15	CODE		L	DES		A	CL	F
NOM.EFF.	88.1		% (100%)						
PF	94								
RATING	40C AMB-S1 CONT				CC				
DE BRG	6206		ODE		6205				
ENCL	TEFC	SN							
BLANK	IE3-91.2(75%)91.3(50%)								
	42KG IC411								

AC Induction Motor Performance Data

Record # 44461

Typical performance - not guaranteed values

Winding: 36WGR595-R001			Type: 3642M		Enclosure: TEFC		
Nameplate Data			400 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		9.04 LB-FT		
Volts		230/400	Start Configuration		direct on line		
Full Load Amps		11.2/6.4	Breakdown Torque		44.9 LB-FT		
R.P.M.		2880	Pull-up Torque		36.1 LB-FT		
Hz	50	Phase	3	Locked-rotor Torque		40 LB-FT	
NEMA Design Code		A	KVA Code	L	Starting Current		68.1 A
Service Factor (S.F.)		1.15		No-load Current		1.73 A	
NEMA Nom. Eff.		88.1	Power Factor	94	Line-line Res. @ 25°C		1.77 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps				Temp. Rise @ S.F. Load		77°C	
				Locked-rotor Power Factor		49	
				Rotor inertia		0.188 LB-FT2	

Load Characteristics 400 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	64	85	90	94	94	94	94
Efficiency	88.4	91.3	91.2	90.2	88.6	87	88.7
Speed	2969	2942	2913	2883	2851	2815	3434
Line amperes	2.42	3.5	4.9	6.32	7.97	9.64	7.3

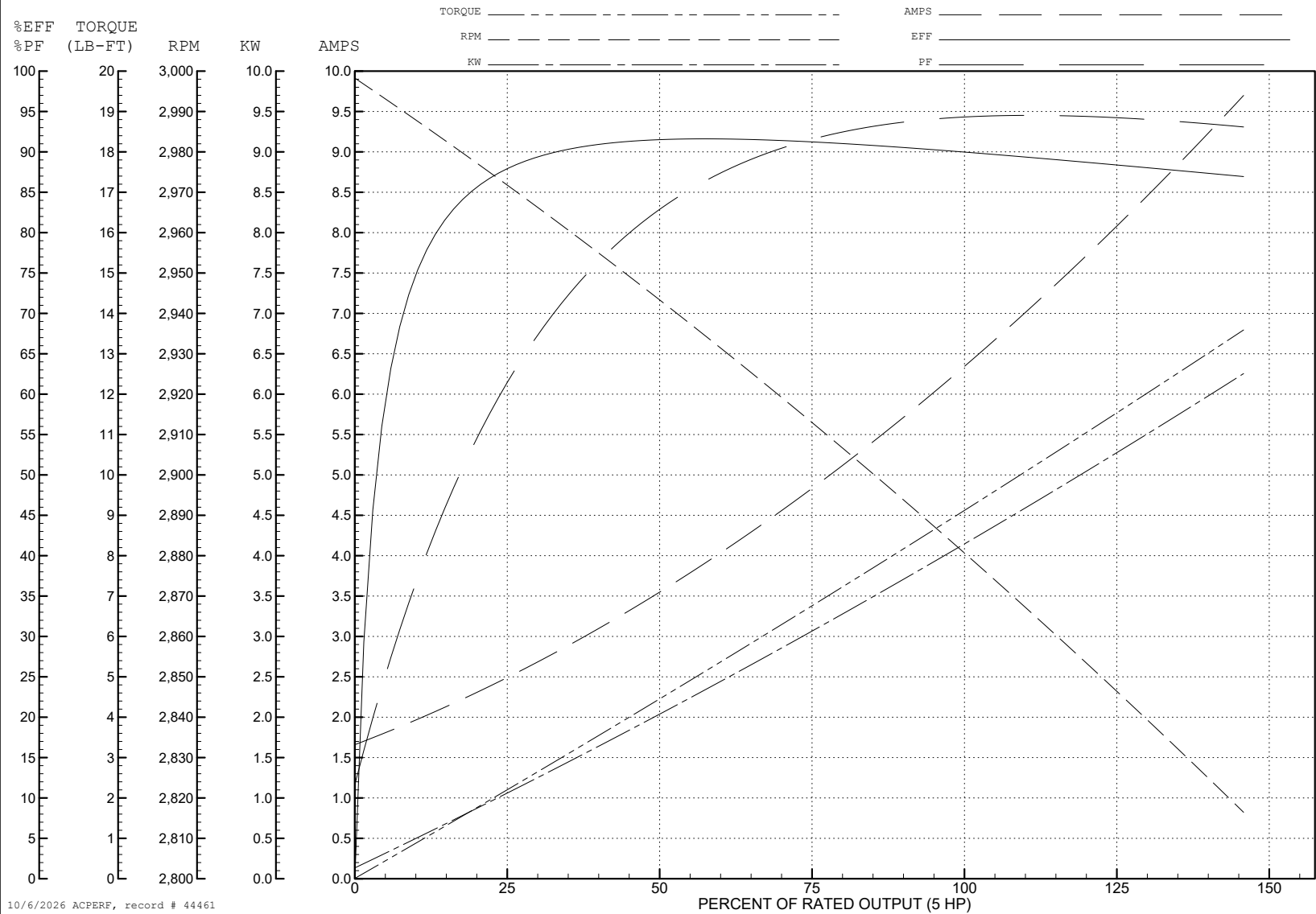
ABB Motors and Mechanical Inc.

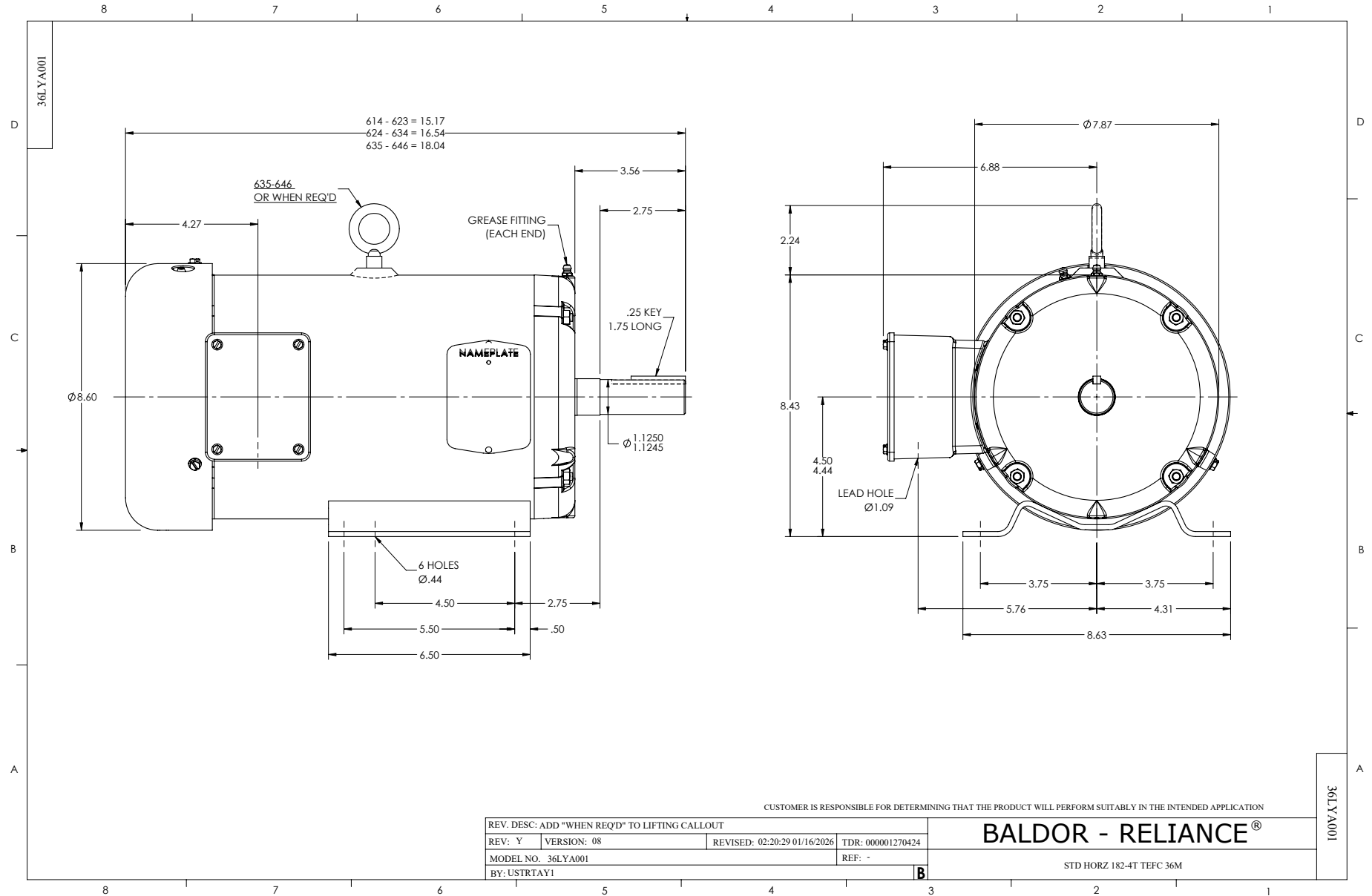
WINDING # 36WGR595

Typical performance - not guaranteed values.

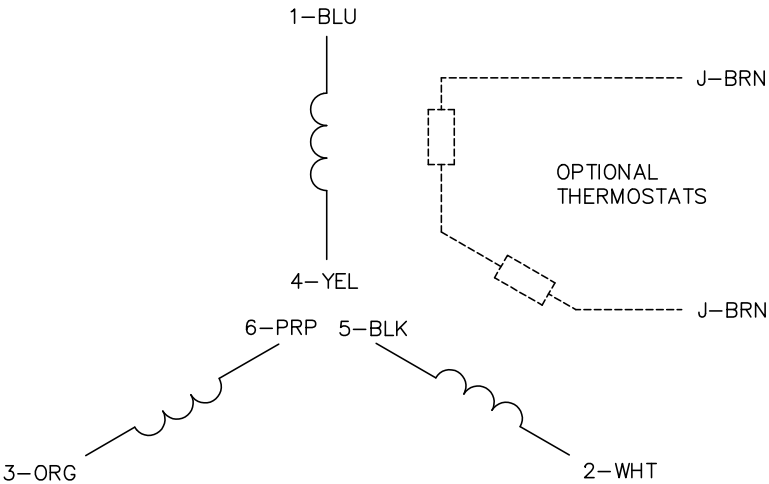
5 HP 3 PH 50 HZ 2880 RPM 400 V 3642M

TORQUES (LB-FT): PO=44.9 PU=36.1 LR=40 LRA=68.1

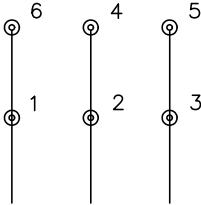




CD0022

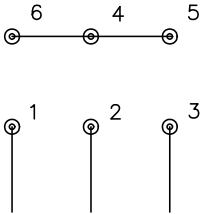


LOW VOLTAGE
(1D)



LINE

HIGH VOLTAGE
(1Y)



LINE

- 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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: F

BY: JLP

REVISED: 01/21/99 3:54

TDR: 0171435

CD0022

FILE: AAA00005144

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022