

BALDOR • RELIANCE

Customer information packet

EMVM3709D

5.5KW, 3450RPM, 3PH, 60HZ, D132D, 3646M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D132D
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	5.500 KW @ 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	CSA EEV CE
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	16.600 A @ 230.0 V 18.200 A @ 208.0 V 8.300 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Front Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	G
Type	AC
Mech. spec.	36N539
Base	
Status	PRD/A
Elec. spec.	36WGR455
Layout	36LYN539
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	05-12-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	8.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Motor Type	3646M
Mounting Arrangement	B5
Number of Poles	2
Overall Length	20.47 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	D-Flange
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.497 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

NP2672L									
CAT.NO.	EMVM3709D								
SPEC.	36N539R455G1								
IEC FRAME	D132D	KW	5.5						
VOLTS	230/460								
AMP	16.6/8.3								
RPM	3450	ENCL	TEFC						
HZ	60	PH	3	CL	F				
SER.F.	1.15	DES	A	CODE	M				
NEMA-NOM-EFF	89.5	I.P.	54						
RATING	40C AMB-CONT								
CC	010A	USABLE AT 208V	N/A						
DE	6208	ODE	6205						
SER. #									

Parts list

Part number	Description	Quantity
SA301019	SA 36N539R455G1	1.000 ea
RA288088	RA 36N539R455G1	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	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
36EP3104A02	FREP MACH W/O GRSR, RAISED FH PADS	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3305A26	PUEP 182-4TC ENCL 208 BRG W/O GREASER	1.000 ea
HW4600A98	SEAL 1.563 X 2.125 X 0.313 SINGLE LIP	1.000 ea
10XN2520A32	1/4 X 2 HEX HEAD CAP SCR, GRADE 2	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HA6221A14	D-FLANGE ADAPT, 213-5C TO IEC D132D	1.000 ea
10XN5013A20	1/2-13X1 1/4 HEX HD CAP	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
36FH4009A101	IEC FH NO GREASER, W/PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
37GS1001	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2505B18	KEY, 8 X 10 MM X 2.00 LONG	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.022 ga
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LC0005	CONN.DIA., TY M, 9-LD, DUAL VOLT, REVERSING	1.000 ea

NP2672L	SS SUPER-E IEC UL CSA PREM CC	1.000 ea
37PA1016	PKG GRP, PRINT PK1035A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 57409

Typical performance - not guaranteed values

Winding: 36WGR455-R004		Type: 3646M	Enclosure: TEFC
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (KW)	5.5	Full Load Torque	11.1 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	16.6/8.3	Breakdown Torque	53.4 LB-FT
R.P.M.	3450	Pull-up Torque	35 LB-FT
Hz	60 Phase	Locked-rotor Torque	50.3 LB-FT
NEMA Design Code	A KVA Code	Starting Current	103 A
Service Factor (S.F.)	1.15	No-load Current	2.62 A
NEMA Nom. Eff.	89.5 Power Factor	Line-line Res. @ 25°C	1.28 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	37°C
S.F. Amps		Temp. Rise @ S.F. Load	45°C
		Locked-rotor Power Factor	44.7
		Rotor inertia	0.205 LB-FT ²

Load Characteristics 460 V, 60 Hz, 5.5 KW

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	60	81	89	92	93	93	93
Efficiency	86.4	90.9	91.4	91	90.4	88.8	90.6
Speed	3572	3545	3516	3487	3455	3422	3468
Line amperes	3.29	4.71	6.41	8.29	10.3	12.5	9.5

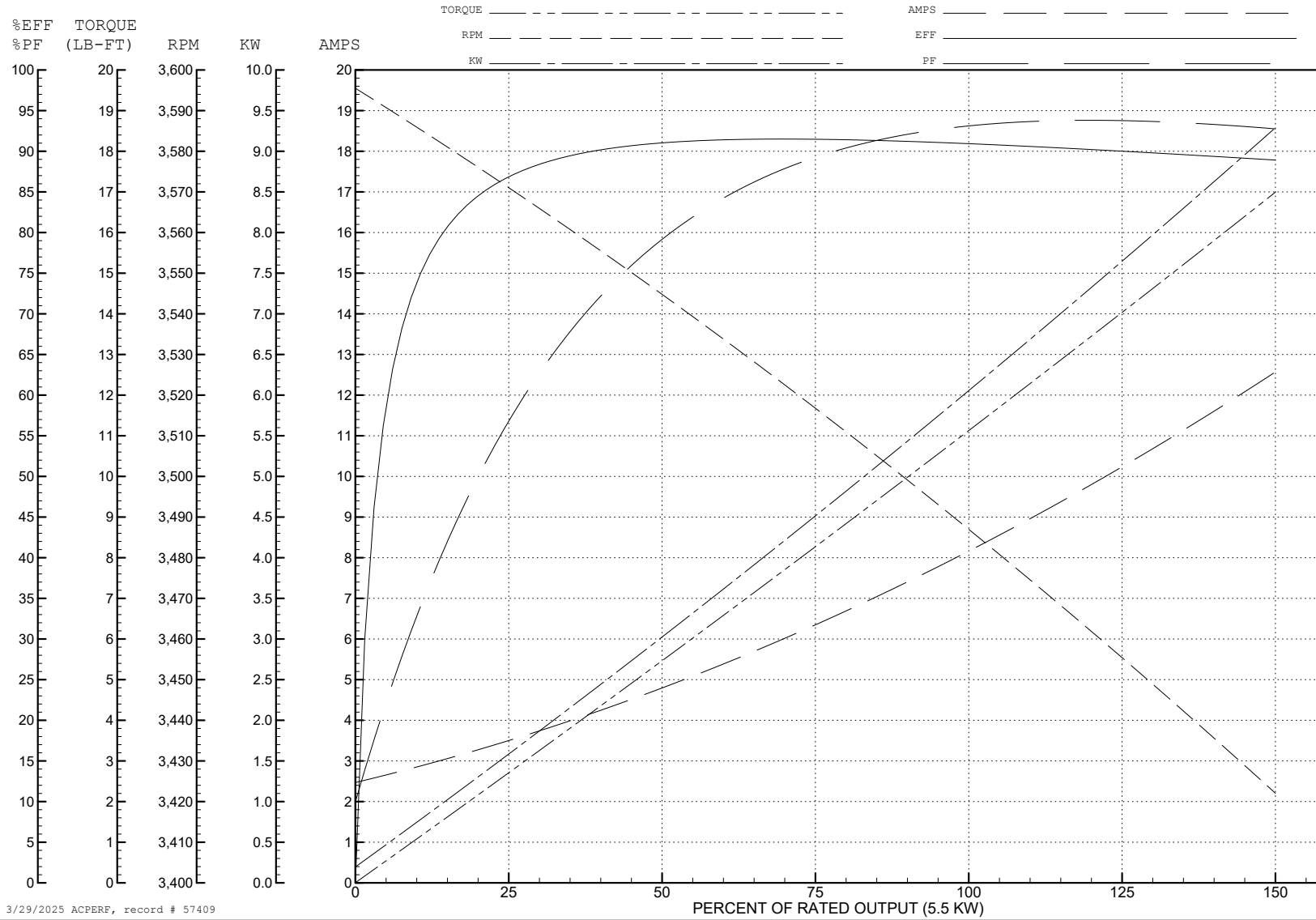
ABB Motors and Mechanical Inc.

WINDING # 36WGR455

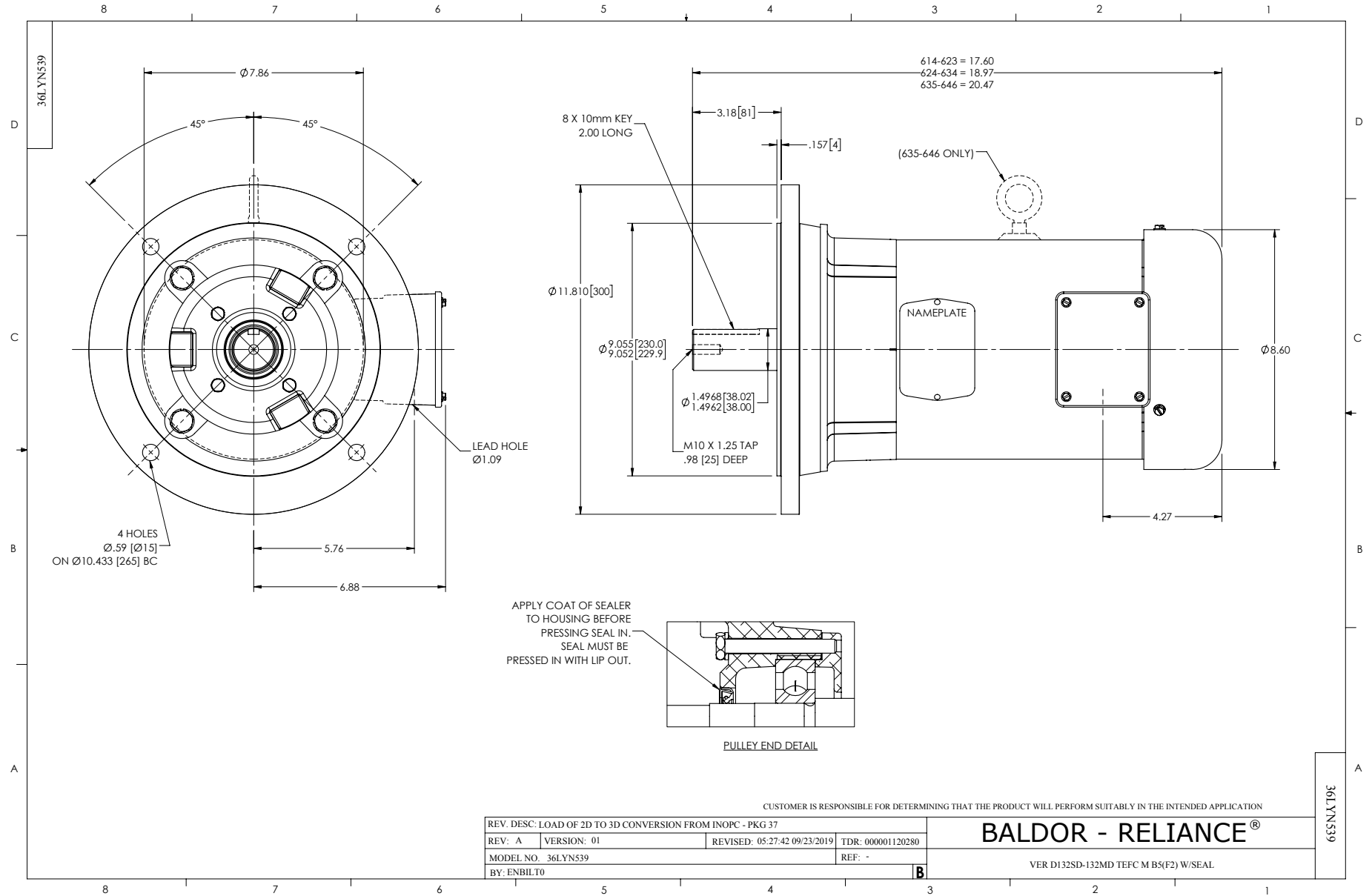
5.5 KW 3 PH 60 HZ 3450 RPM 460 V 3646M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=53.4 PU=35 LR=50.3 LRA=103



3/29/2025 ACPERF, record # 57409



CD0005



LOW VOLTAGE
(2Y)



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS