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# Customer information packet

## EM3545-5

1HP, 3450RPM, 3PH, 60HZ, 56, 3516M, TEFC, F1, N

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	56
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.100 A @ 575.0 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	1.1 a

## Part detail

Revision	G
Type	AC
Mech. spec.	35T696
Base	
Status	PRD/A
Elec. spec.	35WGL509
Layout	35LYT696
Eff. date	04-30-2024
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	03-01-2016

<b>Insulation Class</b>	B
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	K
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	No Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	3 @ 18 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3516M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	12.23 IN
<b>Power Factor</b>	85
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	ROHS COMPLIANT
<b>Service Factor</b>	1.25
<b>Shaft Diameter</b>	0.625 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3450 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP3441L</b>									
<b>CAT.NO.</b>	EM3545-5								
<b>SPEC.</b>	35T696L509G1								
<b>HP</b>	1								
<b>VOLTS</b>	575								
<b>AMP</b>	1.1								
<b>RPM</b>	3450								
<b>FRAME</b>	56		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.25	<b>CODE</b>	K	<b>DES</b>	B	<b>CL</b>	B		
<b>NEMA-NOM-EFF</b>	77	<b>PF</b>	85						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<b>DE</b>	6205	<b>ODE</b>	6203						
<b>ENCL</b>	TEFC	<b>SN</b>							
<b>VPWM INVERTER READY</b>									
<b>CT6-60H(10:1)VT3-60H(20:1</b>									
	SFA 1.3								

**AC Induction Motor Performance Data**

Record # 55694

Typical performance - not guaranteed values

<b>Winding:</b> 35WGL509-R001		<b>Type:</b> 3516M		<b>Enclosure:</b> TEFC	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>		1	<b>Full Load Torque</b>		1.47 LB-FT
<b>Volts</b>		575	<b>Start Configuration</b>		direct on line
<b>Full Load Amps</b>		1.1	<b>Breakdown Torque</b>		6.14 LB-FT
<b>R.P.M.</b>		3450	<b>Pull-up Torque</b>		2.83 LB-FT
<b>Hz</b>	60 Phase	3	<b>Locked-rotor Torque</b>		5.1 LB-FT
<b>NEMA Design Code</b>	B KVA Code	K	<b>Starting Current</b>		8.83 A
<b>Service Factor (S.F.)</b>		1.25	<b>No-load Current</b>		0.471 A
<b>NEMA Nom. Eff.</b>	77 Power Factor	85	<b>Line-line Res. @ 25°C</b>		24.3 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>		38°C
<b>S.F. Amps</b>		1.3	<b>Temp. Rise @ S.F. Load</b>		47°C
			<b>Locked-rotor Power Factor</b>		59.6
			<b>Rotor inertia</b>		0.0443 LB-FT <sup>2</sup>

**Load Characteristics 575 V, 60 Hz, 1 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	54	71	81	85	89	90	89
<b>Efficiency</b>	57.9	71.2	76.3	78.1	78.5	77.2	78.5
<b>Speed</b>	3564	3534	3501	3462	3423	3374	3423
<b>Line amperes</b>	0.547	0.682	0.862	1.09	1.31	1.58	1.31

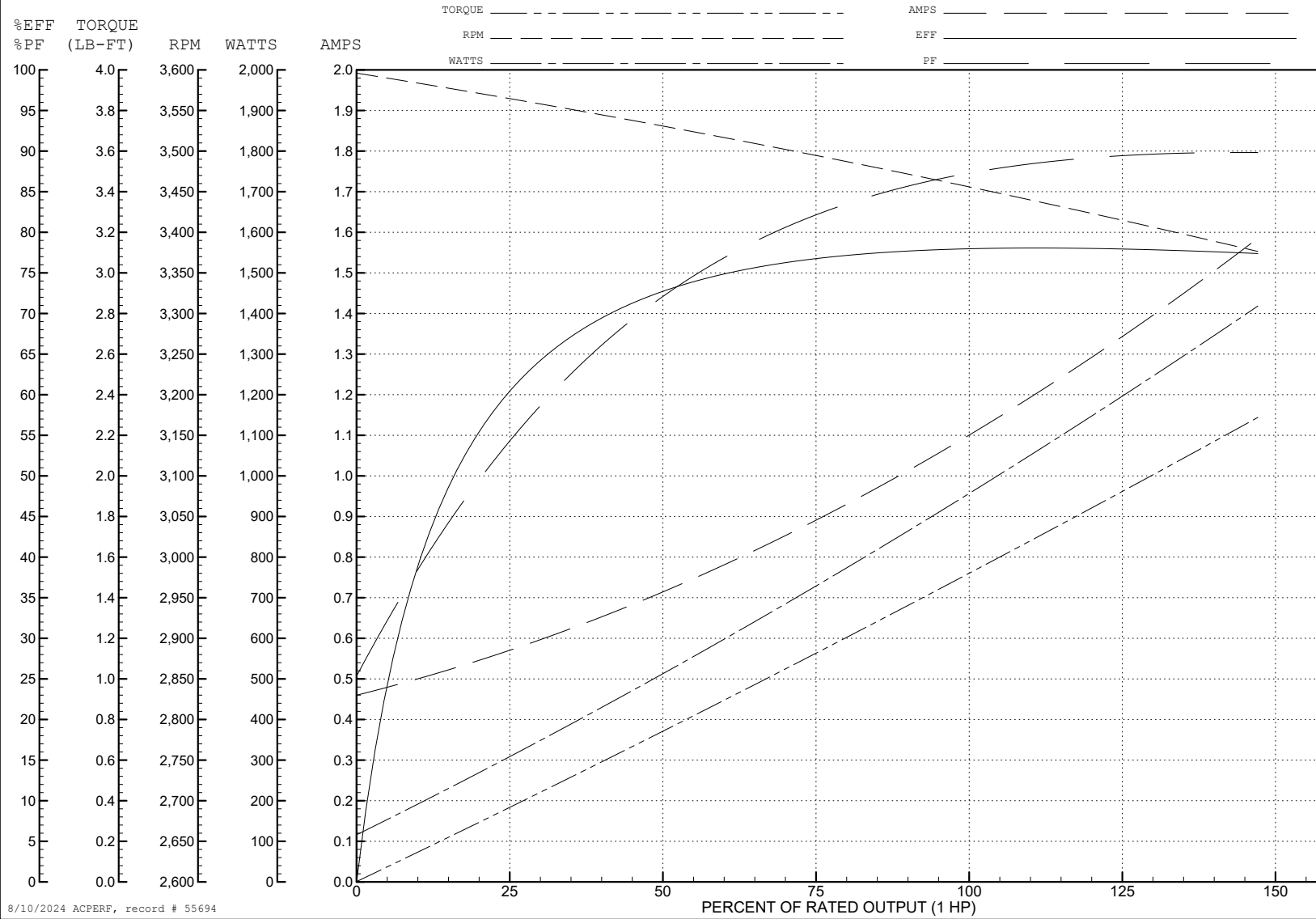
ABB Motors and Mechanical Inc.

WINDING # 35WGL509

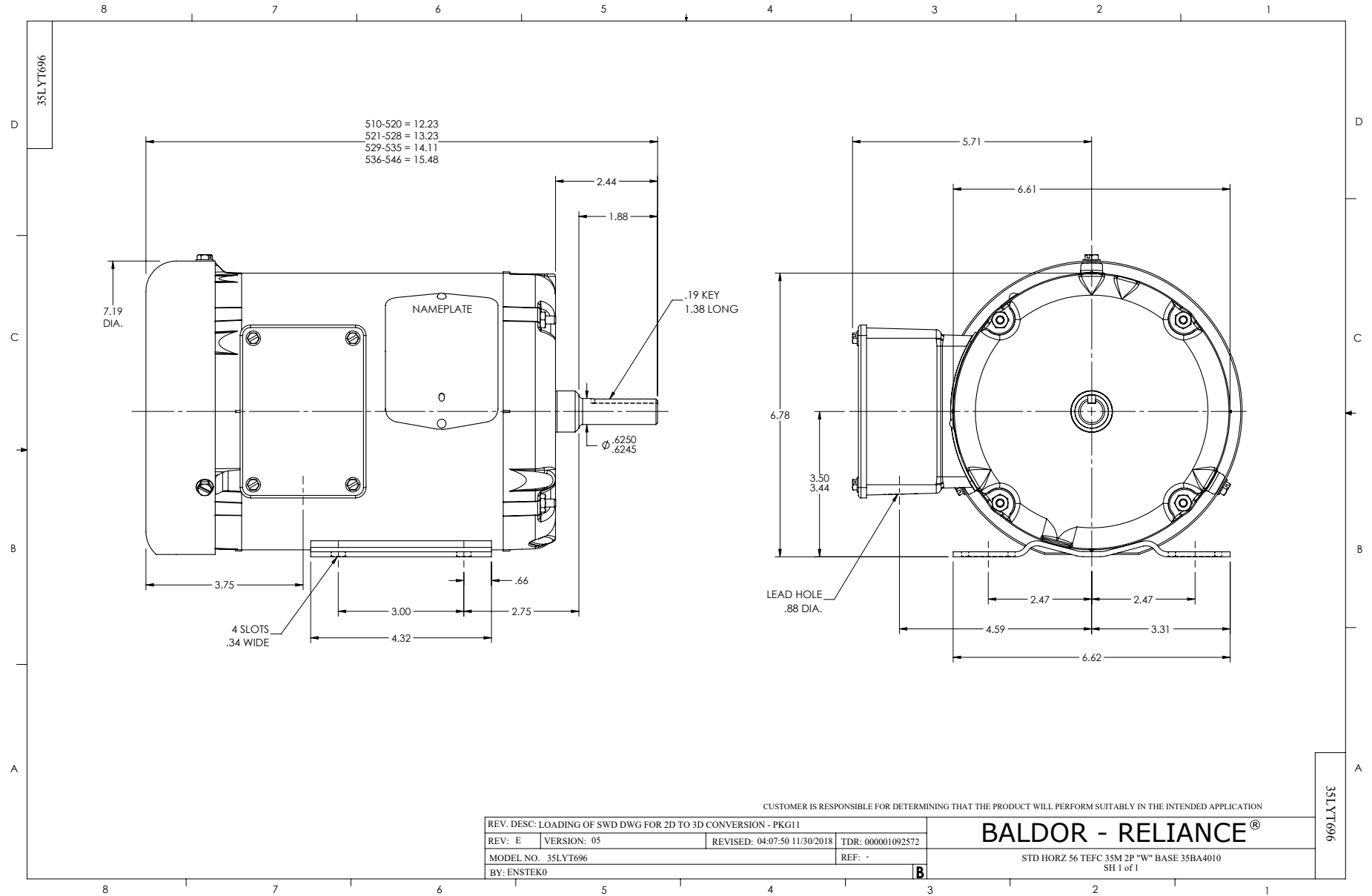
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 575 V 3516M

TORQUES (LB-FT): PO=6.14 PU=2.83 LR=5.1 LRA=8.83



8/10/2024 ACPERF, record # 55694



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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