



Customer information packet

CEM2514T

20HP, 3510RPM, 3PH, 60HZ, 254TC, 3928M, OPSB, F

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	254TC
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	20.000 HP @ 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 CURUSEEV 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	47.000 A @ 230.0 V 51.000 A @ 208.0 V 23.500 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	W
Type	AC
Mech. spec.	39D102
Base	
Status	PRD/A
Elec. spec.	39WGX101
Layout	39LYD102
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	08-03-2010

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	23.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3928M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	21.69 IN
Power Factor	88
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3510 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

NP3554LUA										
CAT.NO.	CEM2514T			P/N				ENCL		OPSB
SPEC.	39D102X101G1	CC	010A	FRAME		254TC	SER.NO.			
HP	20	CLASS		F	HZ	60				
RPM	3510	PH	3	DES		A				
VOLTS	230/460			CODE		G	ODE BRG	6208	DE BRG	6309
AMPS	47/23.5									
RATING	40C AMB-CONT			NEMA-NOM-EFF		91	GREASE	POLYREX EM		
PF	88	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)						
USABLE AT	50HZ 20HP 190/380V 56/28A			SF 1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.								

Parts list

Part number	Description	Quantity
SA200897	SA 39D102X101G1	1.000 ea
RA188207	RA 39D102X101G1	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
HA6016	ADAPTER, CAST CONDUIT BOX	1.000 ea
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
39EP3200A01SP	FR/PU ENDPLATE, MACH	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
39EP3400A01	STD FACE MTD ENDPLATE 309 BRG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
39AD2002C01	BAFFLE PLATE,"X" DIM=2.12 OPEN SLOT BAND	1.000 ea
39AD2002C01	BAFFLE PLATE,"X" DIM=2.12 OPEN SLOT BAND	1.000 ea
HA3154A09	TB STUD 3/8-16 X 16.25	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea

NP3554LUA	SS SUPER-E VPWM INV READY,CURUS-EEV,PREM	1.000 ea
39PA1000	PACKAGING GROUP 39 PRINT	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LD7020E09	LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 13049

Typical performance - not guaranteed values

Winding: 39WGX101-R004		Type: 3928M	Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20	Full Load Torque	29.6 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	47/23.5	Breakdown Torque	111 LB-FT	
R.P.M.	3510	Pull-up Torque	36.1 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	50.6 LB-FT
NEMA Design Code	B KVA Code	G	Starting Current	153 A
Service Factor (S.F.)	1.15	No-load Current	8.61 A	
NEMA Nom. Eff.	91 Power Factor	88	Line-line Res. @ 25°C	0.512 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	44°C	
S.F. Amps		Temp. Rise @ S.F. Load	54°C	
		Locked-rotor Power Factor	30	
		Rotor inertia	0.715 lb-ft ²	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	74	83	87	89	89	88
Efficiency	84.7	90.1	91.2	91	90.1	89.1	90.5
Speed	3581	3563	3544	3522	3496	3472	3506
Line amperes	10.2	13.9	18.1	23.3	29.1	35	26.78

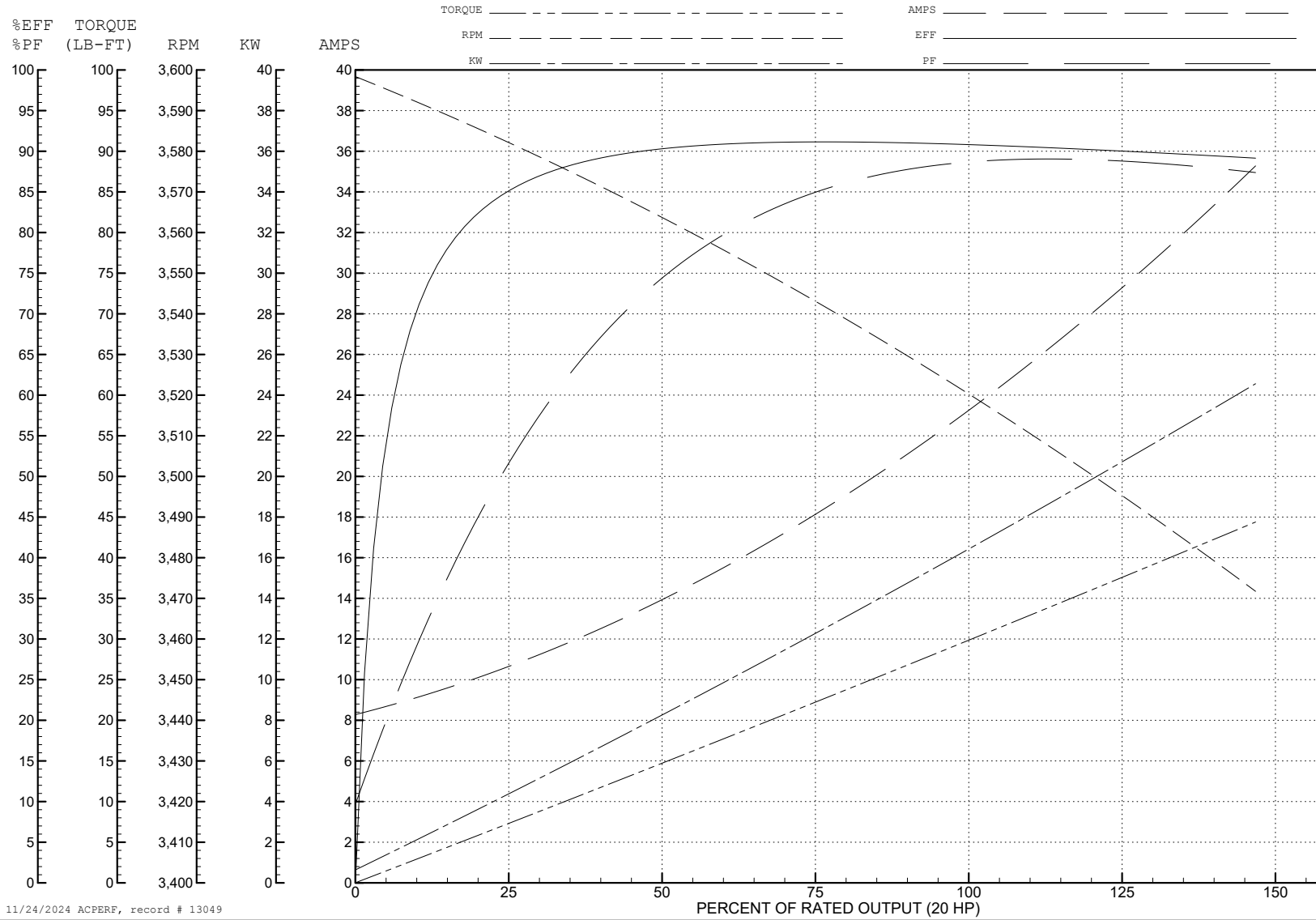
ABB Motors and Mechanical Inc.

WINDING # 39WGX101

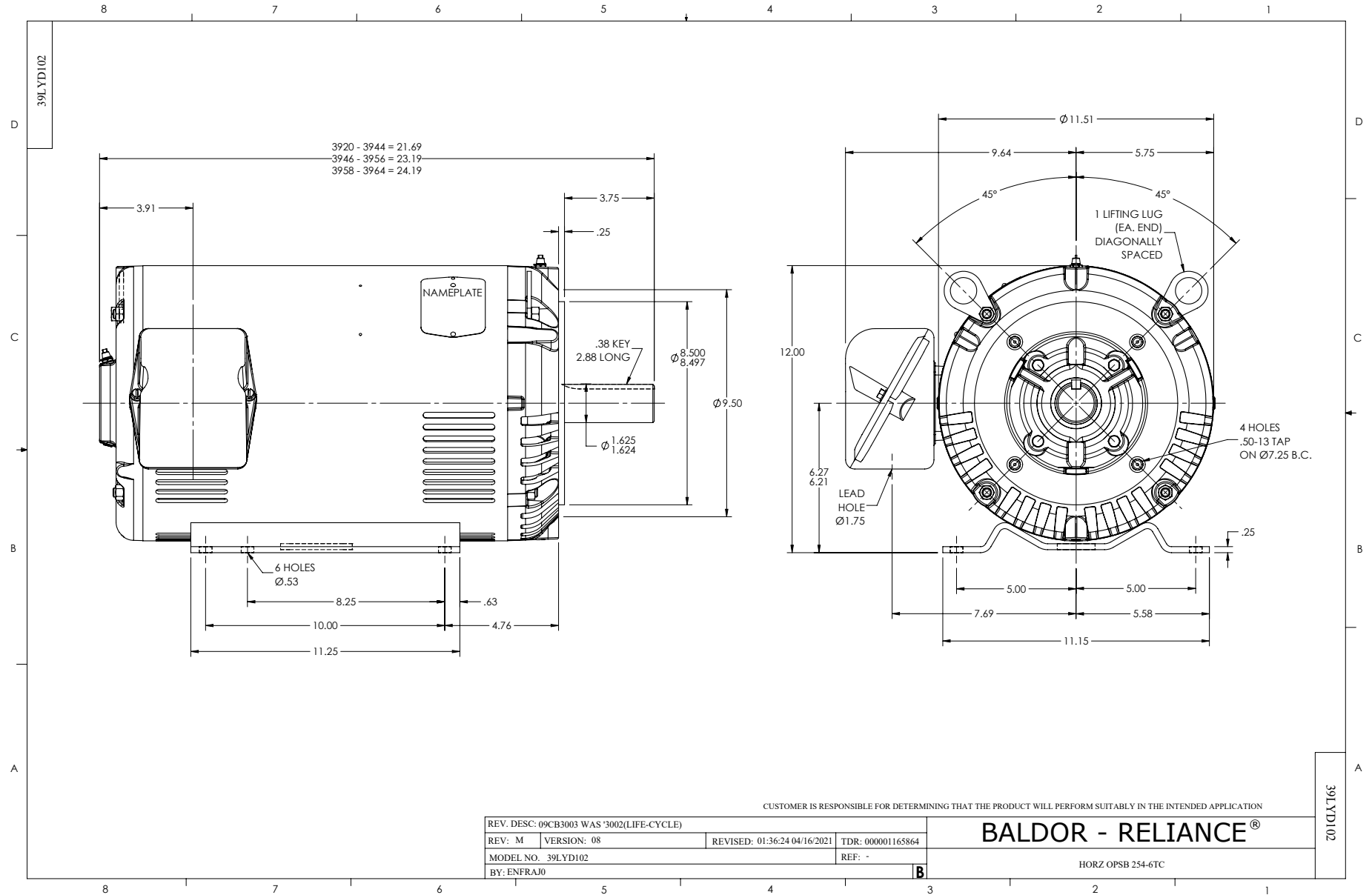
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3510 RPM 460 V 3928M

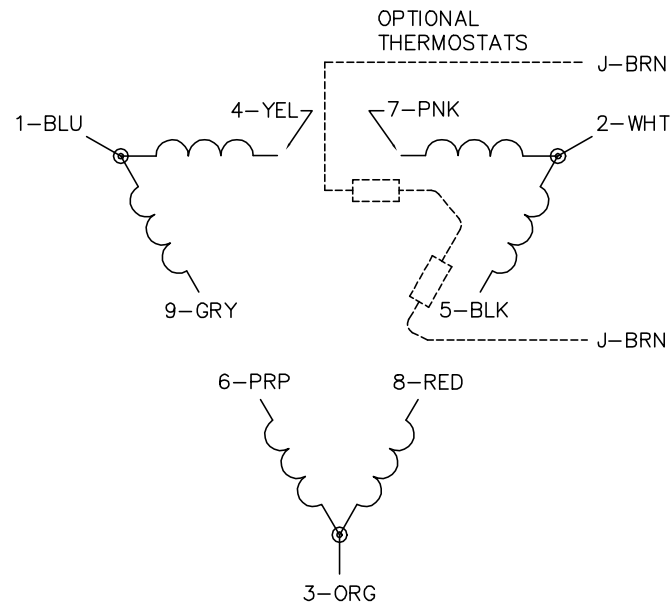
TORQUES (LB-FT): PO=111 PU=36.1 LR=50.6 LRA=153



11/24/2024 ACPERF, record # 13049



CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
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FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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