



Customer information packet

CEM2515T

20HP, 1765RPM, 3PH, 60HZ, 256TC, 3948M, OPSB, F

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	256TC
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	1800 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	48.000 A @ 230.0 V 52.000 A @ 208.0 V 24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	N
Type	AC
Mech. spec.	39D102
Base	
Status	PRD/A
Elec. spec.	39WGX952
Layout	39LYD102
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	06-22-2016

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 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	3948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.19 IN
Power Factor	85
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	1765 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.	CEM2515T			P/N				ENCL		OPSB
SPEC.	39D102X952G1	CC	010A	FRAME		256TC	SER.NO.			
HP	20	CLASS		F	HZ	60				
RPM	1765	PH	3	DES		A				
VOLTS	230/460			CODE		G	ODE BRG	6208	DE BRG	6309
AMPS	48/24									
RATING	40C AMB-CONT			NEMA-NOM-EFF		93	GREASE	POLYREX EM		
PF	85	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)						
USABLE AT	50HZ 20HP 190/380V 58/29A			SF 1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.								

Parts list

Part number	Description	Quantity
SA322724	SA 39D102X952G1	1.000 ea
RA310523	RA 39D102X952G1	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
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 ea
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 ea
HA3154A03	STUD, 3/8-16 X 17.75	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 # 56778

Typical performance - not guaranteed values

Winding: 39WGX952-R001		Type: 3948M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	59.7 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	48/24	Breakdown Torque	187 LB-FT		
R.P.M.	1765	Pull-up Torque	78.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	112 LB-FT
NEMA Design Code	A	KVA Code	G	Starting Current	156 A
Service Factor (S.F.)			1.15	No-load Current	8.83 A
NEMA Nom. Eff.	93	Power Factor	85	Line-line Res. @ 25°C	0.48438 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	37°C
S.F. Amps				Temp. Rise @ S.F. Load	46°C
				Locked-rotor Power Factor	33.3

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	72	81	85	87	87	86
Efficiency	90.2	93.3	93.5	93	92.2	91	92.5
Speed	1792.2	1784.8	1776.1	1767.5	1757.6	1746.3	1762
Line amperes	10.5	14	18.6	23.8	29.4	35.6	27.2

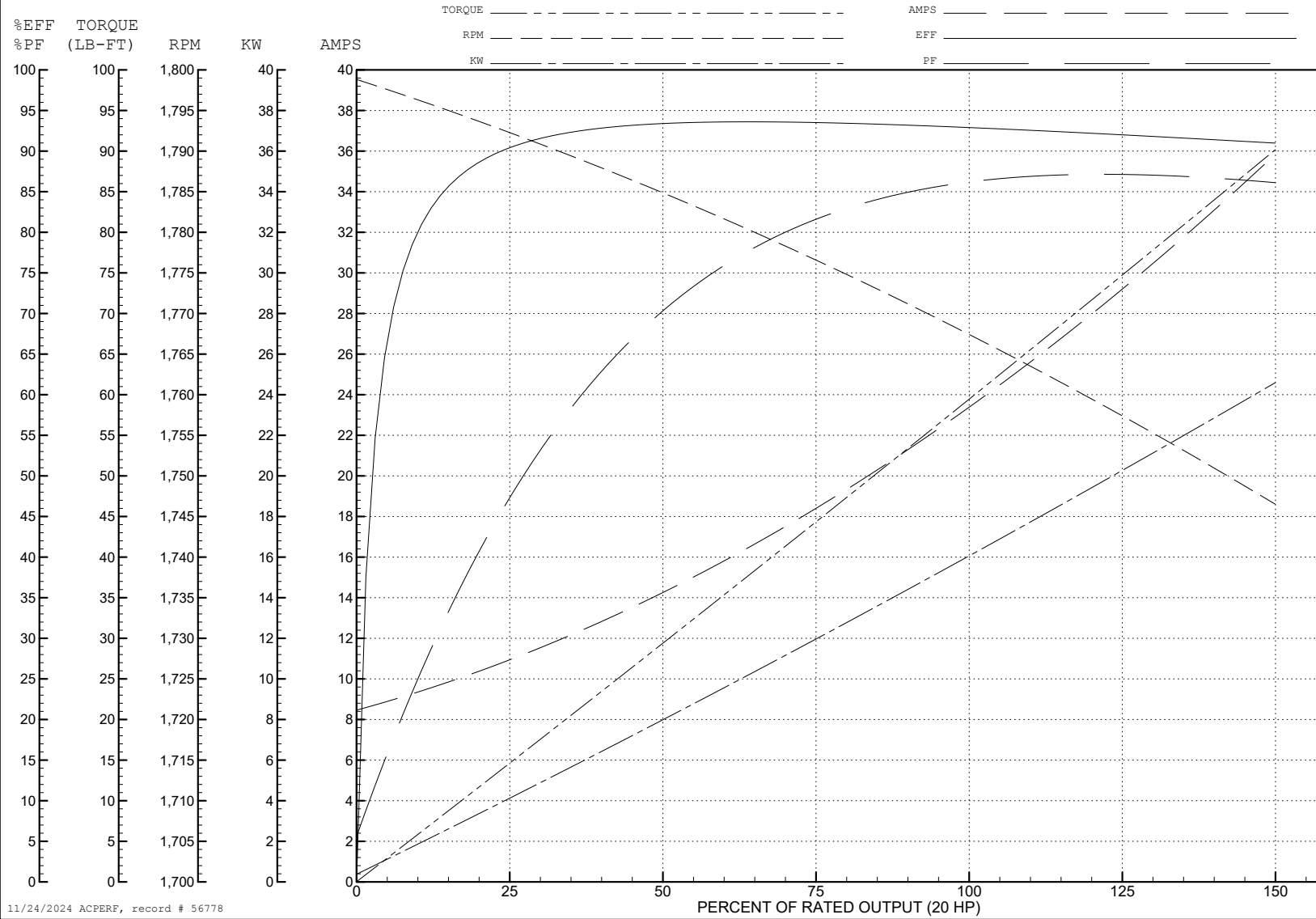
ABB Motors and Mechanical Inc.

WINDING # 39WGX952

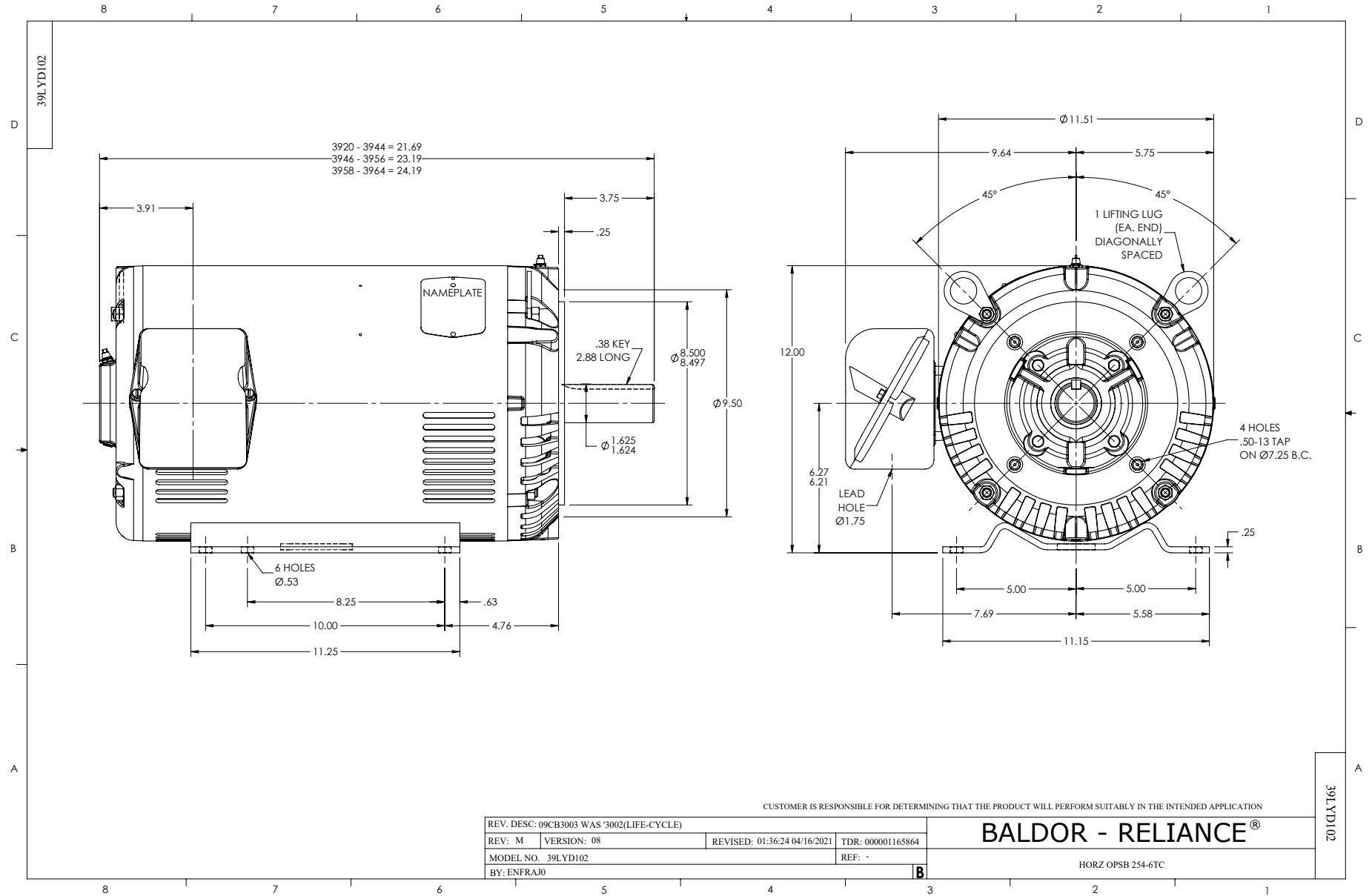
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1765 RPM 460 V 3948M

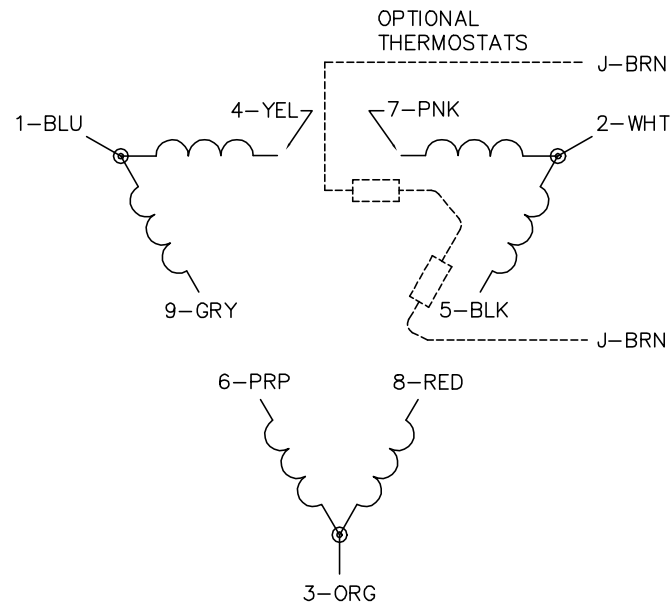
TORQUES (LB-FT): PO=187 PU=78.1 LR=112 LRA=156



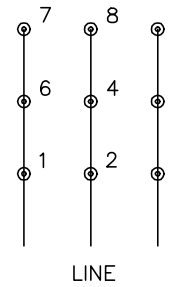
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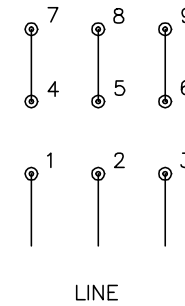
CD0180



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		
REV. LTR: D	VERSION: 01	TDR: 000001099922
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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