ABB BALDOR RELIANCE

Customer information packet

CEM2514T

20HP, 3510RPM, 3PH, 60HZ, 254TC, 3928M, OPSB, F
Class - None
Division - Not Applicable

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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	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
	NEMA PREMIUM (OLD LOGO)
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	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
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	X
Type	AC
Mech. spec.	39D102
Base	
Status	PRD/A
Elec. spec.	39WGX101
Layout	39LYD102
Eff. date	12-12-2025
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	08-03-2010

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.**							

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. @ 25ºC**	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-ft²

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

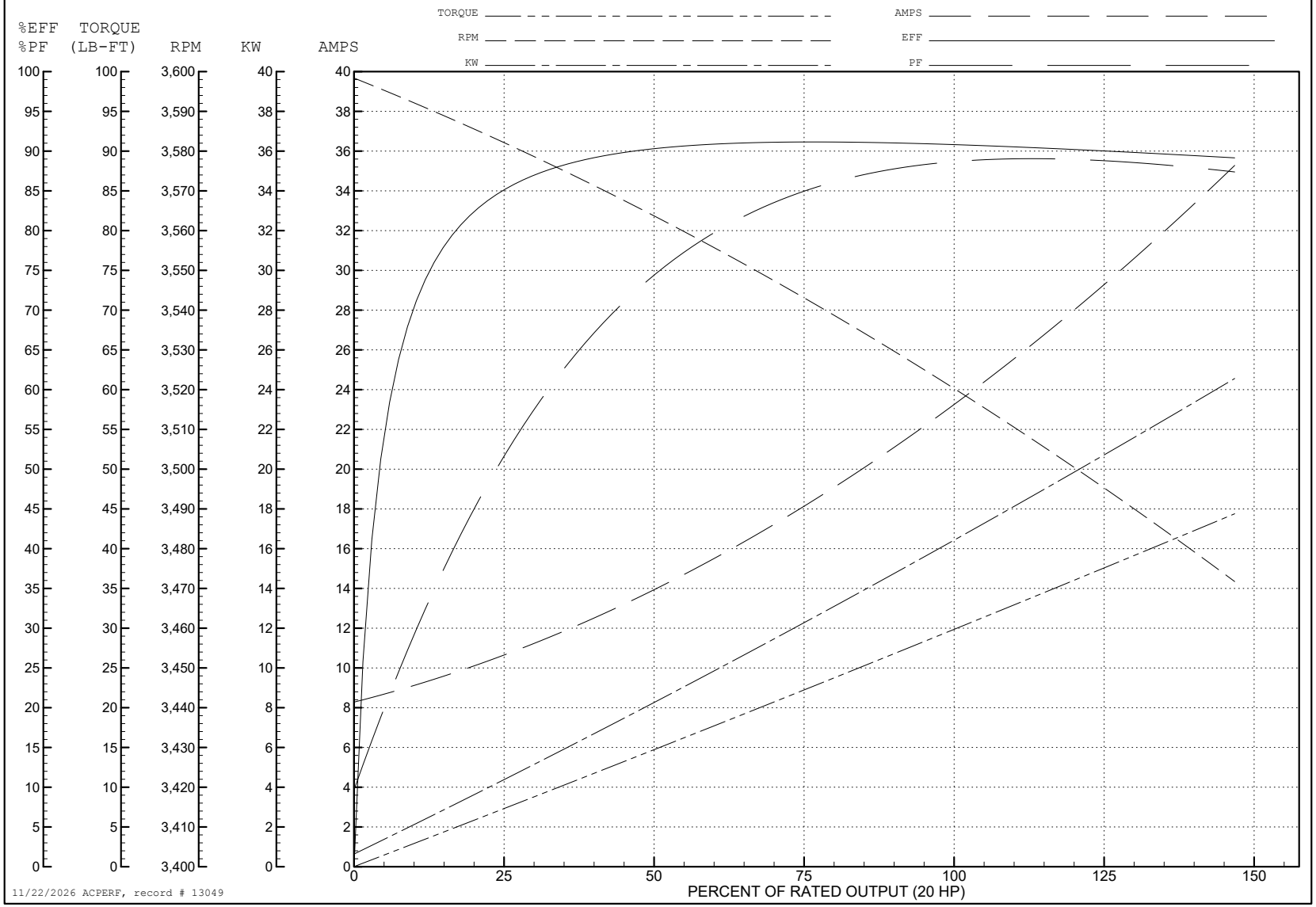
ABB Motors and Mechanical Inc.

WINDING # 39WGX101

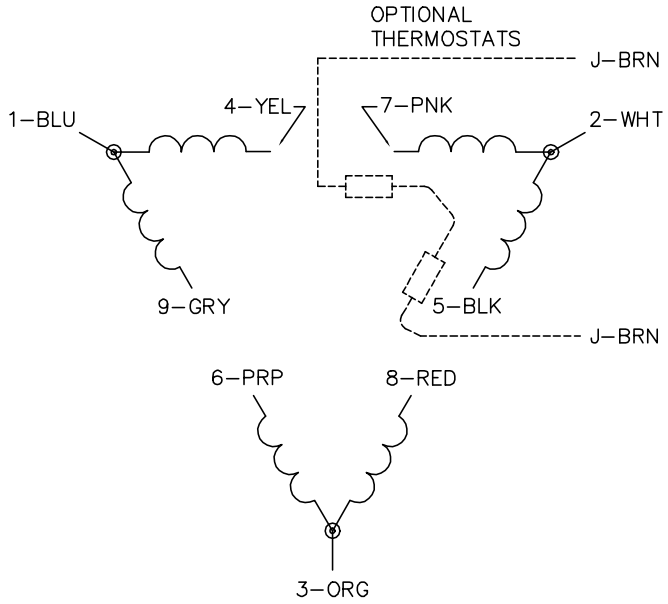
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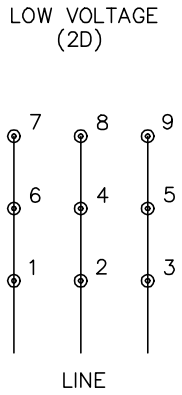
Typical performance - not guaranteed values.

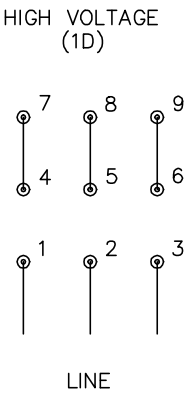
TORQUES(LB-FT): PO=111 PU=36.1 LR=50.6 LRA=153



CD0180







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: ENBRIR0
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BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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