

ABB BALDOR RELIANCE III

Customer information packet

CEM3586T

2HP, 3490RPM, 3PH, 60HZ, 143TC, 0526M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM (OLD LOGO) CURUSEEV NEMA PREMIUM
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	5.300 A @ 208.0 V 5.000 A @ 230.0 V 2.500 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	S
Type	AC
Mech. spec.	05C052
Base	
Status	PRD/A
Elec. spec.	05WGX117
Layout	05LYC052
Eff. date	04-29-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	07-14-2010

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0526M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.04 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	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3490 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

NP1259L											
CAT.NO.	CEM3586T										
SPEC.	05C052X117E7										
HP	2										
VOLTS	208-230/460										
AMP	5.3-5/2.5										
RPM	3490										
FRAME	143TC		HZ	60				PH	3		
SER.F.	1.15	CODE	M	DES	B	CL	F				
NEMA-NOM-EFF	85.5	PF	88								
RATING	40C AMB-CONT										
CC	010A										
DE	6205		ODE	6203							
ENCL	TEFC	SN									

Parts List

Part number	Description	Quantity
SA200230	SA 05C052X117E7	1.000 ea
RA187548	RA 05C052X117E7	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520A06	1/4 20X3/8 HX HD CAP	2.000 ea
06CB3000	BALDOR CONDUIT BOX CAST	1.000 ea
06GS1000	GASKET,CONDUIT BOX	1.000 ea
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP1100A02	FR ENDPLATE, TEFC W/GREASER	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1329A01	PU EP ENCL 143-5TC 205 BRG W/GRSR & STD	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HA3100A28	THRUBOLT 10-32 X 8.187	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A02	IEC FH W/GREASER - W/PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
06CB3500	BALDOR CONDUIT BOX LID	1.000 ea
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea

NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 31839

Typical performance - not guaranteed values

Winding: 05WGX117-R001		Type: 0526M	Enclosure: TEFC
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2	Full Load Torque	2.98 LB-FT
Volts	208-230/460	Start Configuration	direct on line
Full Load Amps	5.3-5/2.5	Breakdown Torque	14.2 LB-FT
R.P.M.	3490	Pull-up Torque	6.33 LB-FT
Hz	60 Phase	Locked-rotor Torque	11.2 LB-FT
NEMA Design Code	B KVA Code	Starting Current	25.9 A
Service Factor (S.F.)	1.15	No-load Current	0.912 A
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	6.9119 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	44°C
S.F. Amps		Temp. Rise @ S.F. Load	52°C

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	75	84	88	90	91	89
Efficiency	74.3	83.5	85.9	86.4	85.9	84.8	86.1
Speed	3571.7	3546.5	3520.2	3492.1	3460.7	3425.5	3473
Line amperes	1.1	1.47	1.93	2.44	3	3.61	2.78

ABB Motors and Mechanical Inc.

WINDING # 05WGX117

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 3490 RPM 460 V 0526M

TORQUES (LB-FT): PO=14.2 PU=6.33 LR=11.2 LRA=25.9





