



Customer information packet

SPM4114T

50HP, 3540RPM, 3PH, 60HZ, 326TS, 1256M, TEFC, F

PFC EQUIPMENT INC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326TS
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	50.000 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	CSA CURUSEEV NEMA PREMIUM NEMA_PREMIUM WEEE
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	56.000 A @ 460.0 V 124.000 A @ 208.0 V 112.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	A
Type	AC
Mech. spec.	12T115
Base	
Status	PRD/A
Elec. spec.	12WGZ343
Layout	12LYT115
Eff. date	03-28-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	10-02-2023

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1256M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	29.21 IN
Power Factor	89
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3540 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

NP4439B05C23L

[illegible]**YR**

Parts list

Part number	Description	Quantity
SA419591	SA 12T115Z343	1.000 ea
RA411532	RA 12T115Z343	1.000 ea
37FN3002C04	EXFN, PLASTIC, 6.00 OD, 2.003 ID	1.000 ea
10CB1000A04P	KO BOX, MACH W/2.00 NPT W/EPOXY PRIMER	1.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 ea
HA3400A32	STUD, 1/2-13 X 7.38	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HA4017A11	1/8 X 2.75 GREASE EXT (F/S)	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea
HA2009A49	SLINGER FOR GROUP E MTRS - 312 BRG.	1.000 ea
80XN0632J10	6-32 X 5/8 SET SCREW, HEX SOC, CUP PT	2.000 ea
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
12EP1111A111P	PUEP 312 BRG FOR GP.E SLINGER W/EPOXY	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea
HA2009A49	SLINGER FOR GROUP E MTRS - 312 BRG.	1.000 ea
80XN0632J10	6-32 X 5/8 SET SCREW, HEX SOC, CUP PT	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea

12FH1002A15LP5	FAN COVER, MACH, W/PRIMER W/MG1025L14	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW2501H25	KEY, 1/2 SQ X 2.875	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.030 ea
12EP1111A43LP5	MACH'D EPOXY PRIMED FREP W/GP.E SLINGER	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.080 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
NP4439B05C23L	SS SUPER PREM,CONN 05(CD0180),AGENCY C,	1.000 ea
14PA1000	PACKAGING 314 GROUP COMBINED PRINT	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LB1636	LABEL, SUPER PREMIUM SP4, 1.75 X 1.75	1.000 ea

AC Induction Motor Performance Data

Record # 101346

Typical performance - not guaranteed values

Winding: 12WGZ343-R001				Type: 1256M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		50		Full Load Torque		74.1 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		112/56		Breakdown Torque		292 LB-FT	
R.P.M.		3540		Pull-up Torque		97.3 LB-FT	
Hz		60		Phase		3	
NEMA Design Code		B		KVA Code		H	
Service Factor (S.F.)		1.15		Starting Current		403 A	
NEMA Nom. Eff.		94.1		Power Factor		89	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		78°C	
S.F. Amps		128/64		Temp. Rise @ S.F. Load		96°C	
				Locked-rotor Power Factor		20.2	
				Rotor inertia		4.38 lb-ft²	

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	60	80	87	89	90	91	90
Efficiency	90.3	93.6	94.3	94.2	93.5	92.8	93.8
Speed	3585	3574	3562	3550	3539	3527	3543
Line amperes	21.6	31.3	42.9	55.7	69.3	82.9	63.9

ABB Motors and Mechanical Inc.

WINDING # 12WGZ343

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3540 RPM 460 V 1256M

TORQUES (LB-FT): PO=292 PU=97.3 LR=134 LRA=403





