



Product Information Packet

PFC EQUIPMENT

VEM3581

1HP,1760RPM,3PH,60HZ,56C,0519M,TEFC,F1,N

Part Detail							
Revision:	L	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGX122	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	05C013	Layout:	05LYC013	Poles:	04	Created Date:	08-03-2010
Base:	N	Eff. Date:	07-19-2017	Leads:	9#18		

Specs			
Catalog Number:	VEM3581	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	56C	KVA Code:	L
Frame Material:	Iron	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	0518M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	71
	CSA EEV	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	No Mounting	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

Current @ Voltage:	1.500 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding
	3.000 A @ 230.0 V	Shaft Rotation:	Reversible
	3.100 A @ 208.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP3441LUA

CAT.NO.	VEM3581											
SPEC	05C013X122G1											
HP	1											
VOLTS	230/460											
AMPS	3/1.5											
RPM	1760											
FRAME	56C					HZ	60				PH	3
SF	1.15				CODE	L		DES	B		CLASS	F
NEMA NOM. EFF	85.5					PF	71					
RATING	40C AMB-CONT											
CC	010A					USABLE AT 208V						3.1
ENCL	TEFC				SER							
DE	6205					ODE	6203					
VPWM INVERTER READY												
CT6-60H(10:1)VT3-60H(20:1												
	50Hz 1HP 190/380V 3.6/1.8A											

Parts List		
Part Number	Description	Quantity
SA201059	SA 05C013X122G1	1.000 EA
RA188364	RA 05C013X122G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
06CB1000A03	CONDUIT BOX, MACH	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
35EP1100A01	STD FR EP-ENCL-03 BRG-TEFC	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP1300A36	SPL FACE MTD. E.P. ENCL. 56C 05 BRG FOR	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
HA3100A47	THRUBOLT 10-32 X 7.625	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A01SP	IEC FH NO GREASER W/PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
06CB1500A01	CONDUIT BOX LID, MACH	1.000 EA
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 EA
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB

Parts List (continued)		
Part Number	Description	Quantity
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

AC Induction Motor Performance Data

Record # 53432 - Typical performance - not guaranteed values

Winding: 05WGX122-R023	Type: 0518M	Enclosure: XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1			Full Load Torque	2.98 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	3/1.5			Breakdown Torque	12.7 LB-FT
R.P.M.	1760			Pull-up Torque	7.92 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	8.7 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	12.2 A
Service Factor (S.F.)	1.15			No-load Current	1.02 A
NEMA Nom. Eff.	85.5	Power Factor	71	Line-line Res. @ 25°C	15.4 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	29°C
S.F. Amps				Temp. Rise @ S.F. Load	34°C
				Locked-rotor Power Factor	54.1
				Rotor inertia	0.106 LB-FT ²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	48	61	70	76	80	74
Efficiency	72.2	82.2	85.2	86	85.6	84.7	85.6
Speed	1790	1781	1771	1760	1748	1736	1754
Line amperes	1.07	1.19	1.35	1.55	1.8	2.06	1.69

Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values





