

BALDOR® • RELIANCE

Product Information Packet

VEM3709T

7.5HP,3450RPM,3PH,60HZ,213TC,3646M,TEFC

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3646M	Elec. Spec:	36WGR454	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	36G843	Layout:	36LYG843
Frame:	213TC	Mounting:	F1	Poles:	02	Created Date:	04-20-2015
Base:	N	Rotation:	R	Insulation:	F	Eff. Date:	08-24-2016
Leads:	9#14					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP3441LUA

CAT.NO.	VEM3709T										
SPEC.	36G843R454G1										
HP	7.5										
VOLTS	230/460										
AMP	16.2/8.1										
RPM	3450										
FRAME	213TC				HZ		60		PH		3
SER.F.	1.15		CODE		M	DES		A	CL		F
NEMA-NOM-EFF	89.5		PF		99						
RATING	40C AMB-CONT										
CC	010A		USABLE AT 208V								17.2
DE	6207				ODE		6205				
ENCL	TEFC		SN								

VPWM INVERTER READY
CT6-60H(10:1)VT3-60H(20:1)

50Hz 7.5HP 190/380V 19/9.5A

SF1.0

Parts List		
Part Number	Description	Quantity
SA299299	SA 36G843R454G1	1.000 EA
RA286316	RA 36G843R454G1	1.000 EA
36CB3000SP	CONDUIT BOX, CAST	1.000 EA
36GS1000	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #8 SCREW	1.000 EA
36FE3104A01	FREP MACH ASSEMBLY FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
36EP1307A01	PU ENDPLATE, MACH	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
36FH4009A102	IEC FH GREASER PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4514GX	CONDUIT BOX LID KIT	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
HW3200A01	3/8-16X3/4 I-BLT WELDED F/S	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB

Parts List (continued)		
Part Number	Description	Quantity
35FN3002A04SP	EXFN, PLASTIC, 6.376 OD, .906 ID W/KEY	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL	1.000 EA
G7PA1000	PKG GRP, PRINT PK1034A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1000/bx) 11/14	1.000 EA

AC Induction Motor Performance Data

Record # 53349 - Typical performance - not guaranteed values

Winding: 36WGR454-R003	Type: 3646M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5			Full Load Torque	11.5 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	16.2/8.1			Breakdown Torque	69.2 LB-FT
R.P.M.	3450			Pull-up Torque	46.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	54.7 LB-FT
NEMA Design Code	A	KVA Code	M	Starting Current	98.3 A
Service Factor (S.F.)	1.15			No-load Current	2.35 A
NEMA Nom. Eff.	89.5	Power Factor	99	Line-line Res. @ 25°C	1.14 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	66°C
S.F. Amps				Temp. Rise @ S.F. Load	79°C
				Locked-rotor Power Factor	44.3
				Rotor inertia	0.206 LB-FT ²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	64	88	96	99	98	98	98
Efficiency	82.1	88.8	90.2	89.4	88.9	87.4	89.1
Speed	3572	3545	3514	3477	3449	3408	3460
Line amperes	2.83	4.12	5.91	8.07	9.92	12.3	9.18

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values





