

ABB BALDOR RELIANCE III

Customer information packet EM2555T

100HP, 1780RPM, 3PH, 60HZ, 404T, 4484M, OPSB, F

Specifications

Enclosure	OPSB
Frame	404T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 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	236.000 A @ 230.0 V 248.000 A @ 208.0 V 118.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	118.0 a

Part Detail

Revision	T
Type	AC
Mech. spec.	44E057
Base	
Status	PRD/A
Elec. spec.	44WGW308
Layout	44LYE057
Eff. date	11-19-2024
CD Diagram	CD0180
Poles	04
Leads	9#4
Proprietary	False
Created date	08-06-2010

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 4 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4484M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	34.47 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1780 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

NP2138LUA												
CAT.NO.	EM2555T			P/N					ENCLOSURE			OPSB
SPEC.	44E057W308G1		CC	010A	FRAME		404T		S/N			
HP	100			CLASS		F	HZ		60			
RPM	1780			PH	3	DES		A				
VOLT	230/460			KVA-CODE			H		ODE BRG	6312	DE BRG	6316
AMP	236/118											
RATING	40C AMB-CONT			GREASE			POLYREX EM					
NEMA-NOM-EFF	95.4	PF	83	SER.F.	1.15							
	50Hz 100Hp 190/380V 280/140A						SF 1.0					
HTR-VOLTS	HTR-AMPS											

Parts List

Part number	Description	Quantity
SA201361	SA 44E057W308G1	1.000 ea
RA188660	RA 44E057W308G1	1.000 ea
HA6731	LIFTING LUG FOR 44 FRAME MOTORS.	2.000 ea
HA6648A01	CAST ADAPTER, 44 FRAME - NEMA 404-5 - MA	1.000 ea
19XW3816A12	.38-16 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	2.000 ea
18CB1006A04	CB 318 3.62 LD HOLE, .38 MTG HOLE & 3.88	1.000 ea
19XW3118A16	.31-18 HEX WASHER HEAD TAPTITE II 1.00 L	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
10XN3118K08	5/16-18 X .50 GRADE #5, STL, ZINC PLATE	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	1.000 ea
44EP1203A02	FREP, MACH	1.000 ea
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 ea
10XN3816K48	3/8-16 X 3 HEX HD CAP SCREW,Z/P	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
44EP1202A01	PU ENDPLATE, MACH.	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 ea
18CB1506A01	CB LID 318 FOR 18CB1006	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
HW2501K66	KEY, 3/4 SQ X 5.625	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.080 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea

44AD2003A01	BAFFLE PLATE 44 OPSB, "X" = -.470, "Y" =	1.000 ea
44AD2003A01	BAFFLE PLATE 44 OPSB, "X" = -.470, "Y" =	1.000 ea
HA3175A03	THRUBOLT STUD 1/2-13 X 24.250 - GRADE 2	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP2138LUA	ALUM SUPER-E UL PREM CC (300SER)	1.000 ea
44PA2000	PKGP, CTN ID 42X34X25, STD BASE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 31771

Typical performance - not guaranteed values

Winding: 44WGW308-R001				Type: 4484M		Enclosure: OPSB	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		100		Full Load Torque		295 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		236/118		Breakdown Torque		884 LB-FT	
R.P.M.		1780		Pull-up Torque		375 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		498 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		852 A	
Service Factor (S.F.)		1.15		No-load Current		46.4 A	
NEMA Nom. Eff.		95.4	Power Factor	Line-line Res. @ 25°C		0.045551 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		47°C	
S.F. Amps				Temp. Rise @ S.F. Load		57°C	
				Locked-rotor Power Factor		25.3	
				Rotor inertia		15.9 LB-FT2	

Load Characteristics 460 V, 60 Hz, 100 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	70	79	83	85	86	84
Efficiency	92.6	95.3	95.7	95.6	95.2	94.6	95.4
Speed	1794	1789.8	1785.5	1780.7	1775.5	1769.8	1778
Line amperes	54.2	70.6	92.8	118	145	173	134

ABB Motors and Mechanical Inc.

WINDING # 44WG308

Typical performance - not guaranteed values.

100 HP 3 PH 60 HZ 1780 RPM 460 V 4484M

TORQUES (LB-FT): PO=884 PU=375 LR=498 LRA=852





