

ABB BALDOR RELIANCE III

Customer information packet

EM2551TS-12

75HP, 1775RPM, 3PH, 60HZ, 365TS, 4462M, OPSB, F

Specifications

Enclosure	OPSB
Frame	365TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 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	174.000 A @ 230.0 V 87.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
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	87.0 a
Insulation Class	F

Part Detail

Revision	U
Type	AC
Mech. spec.	44E018
Base	
Status	PRD/A
Elec. spec.	44WGW162
Layout	44LYE018
Eff. date	11-19-2024
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	08-06-2010

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4462M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	31.59 IN
Power Factor	87
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
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.	EM2551TS-12				P/N					ENCLOSURE		OPSB	
SPEC.	44E018W162G1		CC	010A		FRAME		365TS		S/N			
HP	75				CLASS		F	HZ	60				
RPM	1775				PH	3	DES		B				
VOLT	230/460				KVA-CODE			F	ODE BRG		6312	DE BRG	6313
AMP	174/87												
RATING	40C AMB-CONT				GREASE			POLYREX EM					
NEMA-NOM-EFF	95	PF	87	SER.F.		1.15							
	50Hz 75Hp 190/380V 208/104A							SF 1.0					
HTR-VOLTS			HTR-AMPS										

Parts List

Part number	Description	Quantity
SA201360	SA 44E018W162G1	1.000 ea
RA188659	RA 44E018W162G1	1.000 ea
HA6731	LIFTING LUG FOR 44 FRAME MOTORS.	2.000 ea
HA6616A01	CAST ADAPTOR, 44 FRAME - NEMA 364-5 - 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
10CB3002A02	CB 309 3.62 LD HOLE, .38 MTG HOLE & 3.50	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
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
44EP1203A02	FREP, MACH	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.080 ga
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
44EP1203A01	PU ENDPLATE, MACH	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H18	KEY, 1/2 SQ X 2.000	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
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
44AD2001A02	BAFFLE 44 OPEN,"X"=1.50, SLOTTED BAND MT	1.000 ea

44AD2001A02	BAFFLE 44 OPEN,"X"=1.50, SLOTTED BAND MT	1.000 ea
HA3175A02	THRUBOLT STUD 1/2-13 X 24.500 - GRADE 2	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0104A01	CONNECTION DIAGRAM	1.000 ea
NP2138LUA	ALUM SUPER-E UL PREM CC (300SER)	1.000 ea
44PA2000	PKGP, CTN ID 42X34X25, STD BASE	1.000 ea

AC Induction Motor Performance Data

Record # 31071

Typical performance - not guaranteed values

Winding: 44WGW162-R001			Type: 4462M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		75	Full Load Torque		222 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		174/87	Breakdown Torque		617 LB-FT	
R.P.M.		1775	Pull-up Torque		239 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		332 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		512 A	
Service Factor (S.F.)		1.15	No-load Current		26.4 A	
NEMA Nom. Eff.		95 Power Factor	Line-line Res. @ 25°C		0.0781 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		30°C	
S.F. Amps			Temp. Rise @ S.F. Load		37°C	
			Locked-rotor Power Factor		26.3	
			Rotor inertia		11.7 LB-FT2	

Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	77	83	87	87	87	87
Efficiency	93.6	95.5	96	95.3	94.9	93.9	95.1
Speed	1794	1788	1782	1776	1769	1761	1772
Line amperes	34.1	48.2	66.2	87	106	128	97.8

ABB Motors and Mechanical Inc.

WINDING # 44WGW162

Typical performance - not guaranteed values.

75 HP 3 PH 60 HZ 1775 RPM 460 V 4462M

TORQUES (LB-FT): PO=617 PU=239 LR=332 LRA=512





