

ABB BALDOR RELIANCE III

Customer information packet

EM2547T-12

60HP, 1775RPM, 3PH, 60HZ, 364T, 4278M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	364T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	60.000 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	144.000 A @ 208.0 V 68.000 A @ 460.0 V 136.000 A @ 230.0 V
Design Code	A
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	68.0 a

Part Detail

Revision	Y
Type	AC
Mech. spec.	42E211
Base	
Status	PRD/A
Elec. spec.	42WGW658
Layout	42LYE211
Eff. date	11-29-2023
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	07-29-2009

Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
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	4278M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.69 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	2.375 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.	EM2547T-12				P/N					ENCLOSURE		OPSB	
SPEC.	42E211W658		CC	010A		FRAME		364T		S/N			
HP	60				CLASS		F	HZ		60			
RPM	1775				PH	3	DES		A				
VOLT	230/460				KVA-CODE			G		ODE BRG	6311	DE BRG	6313
AMP	136/68												
RATING	40C AMB-CONT				GREASE		POLYREX EM						
NEMA-NOM-EFF	95	PF	87	SER.F.		1.15							
	50Hz 60Hp 190/380V 162/81A							SF 1.0					
HTR-VOLTS		HTR-AMPS											

Parts List

Part number	Description	Quantity
SA184472	SA 42E211W658	1.000 ea
RA172307	RA 42E211W658	1.000 ea
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	2.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 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
10CB3002	CONDUIT BOX CAST W/3.625 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
42EP3200A01	FR ENDPLATE, MACH	1.000 ea
HW5100A13	W4627-047 WVY WSHR	1.000 ea
42EP1202A01	STD PU ENDPLATE MODEL 42 313 BRG.	1.000 ea
10XN3816K44	3/8-16 X 2.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 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
HW2501J36	KEY, 5/8 SQ X 4.250	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	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	2.000 ea
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea

42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea
HA3151A12	THRUBOLT STUD 1/2-13 X 23.00	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
42PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 25763

Typical performance - not guaranteed values

Winding: 42WGW658-R001			Type: 4278M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		60	Full Load Torque		177 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		136/68	Breakdown Torque		624 LB-FT		
R.P.M.		1775	Pull-up Torque		245 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		314 LB-FT	
NEMA Design Code		A	KVA Code	G	Starting Current		470 A
Service Factor (S.F.)		1.15		No-load Current		22.2 A	
NEMA Nom. Eff.		95	Power Factor	87	Line-line Res. @ 25°C		0.0815 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		30°C	
S.F. Amps				Temp. Rise @ S.F. Load		36°C	
				Locked-rotor Power Factor		26	
				Rotor inertia		10.4 LB-FT2	

Load Characteristics 460 V, 60 Hz, 60 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	77	85	87	88	88	88
Efficiency	92.7	94.9	95.5	95	94.5	93.9	94.7
Speed	1793	1787	1781	1775	1769	1762	1771
Line amperes	27.3	38.7	52.1	67.6	83.6	101	77.2

ABB Motors and Mechanical Inc.

WINDING # 42WGW658

Typical performance - not guaranteed values.

60 HP 3 PH 60 HZ 1775 RPM 460 V 4278M

TORQUES (LB-FT): PO=624 PU=245 LR=314 LRA=470



