

ABB BALDOR RELIANCE III

Customer information packet

EM2515T-CI

20HP, 1765RPM, 3PH, 60HZ, 256T, 0946M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	256T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 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	48.000 A @ 230.0 V 49.000 A @ 208.0 V 24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	Y
Type	AC
Mech. spec.	09D01
Base	
Status	PRD/A
Elec. spec.	09WGY363
Layout	09LYD001
Eff. date	12-20-2024
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	03-08-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0946M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	22.37 IN
Power Factor	84
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1765 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

NP3554LUA											
CAT.NO.	EM2515T-CI			P/N						ENCL	OPEN
SPEC.	09D001Y363G2	CC	010A	FRAME		256T	SER.NO.				
HP	20		CLASS		F	HZ	60				
RPM	1765		PH	3	DES		A				
VOLTS	230/460			CODE		H	ODE BRG	6208	DE BRG	6309	
AMPS	48/24										
RATING	40C AMB-CONT		NEMA-NOM-EFF			93	GREASE	POLYREX EM			
PF	84	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)							
USABLE AT	50HZ 20HP 190/380V 54/27A			SF 1.0							
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

Parts List

Part number	Description	Quantity
SA191855	SA 09D001Y363G2	1.000 ea
RA179511	RA 09D001Y363G2	1.000 ea
HW1001A10	WASHER, #10 SPLT LK, ZN X	3.000 ea
09EP1200A01	FR ENDPLATE, MACH	1.000 ea
10XN3816K52	3/8-16 X 3-1/4 HEX HEAD CAP SCREW GRD 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
HW1001A10	WASHER, #10 SPLT LK, ZN X	3.000 ea
09EP1201A01	PU ENDPLATE, MACH	1.000 ea
10XN3816K52	3/8-16 X 3-1/4 HEX HEAD CAP SCREW GRD 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
09CB3003A01	CB W/1.75" DIA LD HL , .31-18 TAP GROUND	1.000 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
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea
09AD2000A01	45R DEFLECTOR, 309 OPEN	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.070 ga
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
09AD2000A01	45R DEFLECTOR, 309 OPEN	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea

HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LC0005E01	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	1.000 ea
NP3554LUA	SS SUPER-E VPWM INV READY,CURUS-EEV,PREM	1.000 ea
09PA1000	PACKAGING GROUP COMBINED PRINT	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 32255

Typical performance - not guaranteed values

Winding: 09WGY363-R003			Type: 0946M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		20	Full Load Torque		60 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		48/24	Breakdown Torque		190 LB-FT		
R.P.M.		1765	Pull-up Torque		100 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		110 LB-FT		
NEMA Design Code		A	KVA Code		H	Starting Current	164 A
Service Factor (S.F.)		1.15	No-load Current		8.5 A		
NEMA Nom. Eff.		93	Power Factor		84	Line-line Res. @ 25°C	0.433 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		46°C		
S.F. Amps			Temp. Rise @ S.F. Load		56°C		
			Locked-rotor Power Factor		33.6		
			Rotor inertia		2.01 LB-FT2		

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	74	83	87	89	89	88
Efficiency	87.4	91.9	92.8	93	92.2	91.4	92.4
Speed	1792	1784	1775	1767	1757	1748	1761
Line amperes	10.2	13.7	18.2	23.1	28.5	34.2	26.2

ABB Motors and Mechanical Inc.

WINDING # 09WGY363

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1765 RPM 460 V 0946M

TORQUES (LB-FT): PO=190 PU=100 LR=110 LRA=164





