

ABB BALDOR RELIANCE III

Customer information packet

EM3771T-G

10HP, 3490RPM, 3PH, 60HZ, 215T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215T
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	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV NEMA PREMIUM UR
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	24.800 A @ 208.0 V 23.600 A @ 230.0 V 11.800 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGY855
Layout	07LYL783
Eff. date	04-29-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	04-12-2019

High Voltage Full Load Amps	11.8 a
Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0730M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.45 IN
Power Factor	87
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	3490 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3441LUA									
CAT.NO.	EM3771T-G								
SPEC	07-0000-0087								
HP	10								
VOLTS	230/460								
AMPS	23.6/11.8								
RPM	3490								
FRAME	215T		HZ	60		PH	3		
SF	1.15	CODE	G	DES	B	CLASS	H		
NEMA NOM. EFF	90.2	PF	87						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6307		ODE	6206					
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	50HZ 10HP 190/380V 27.8/13.9A						SF1.0		

Parts List

Part number	Description	Quantity
SA368440	SA 07-0000-0087	1.000 ea
RA357951	RA 07-0000-0087	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
07FH4007SP	PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36FN3000C02SP	EXFN, PLASTIC, 5.25 OD, 1.175 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 ea
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
37EP1100A01	FR ENDPLATE MACH	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
37EP1101A09	SPL PULLEY EP ENCL 37 307 BRG.	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
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
09GS1013SP	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 ea

51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
10XL3807A28	3/8-7 X 1 3/4" LAG SCREW	2.000 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

AC Induction Motor Performance Data

Record # 69610

Typical performance - not guaranteed values

Winding: 07WGY855-R014			Type: 0730M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		10	Full Load Torque		15.1 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		23.6/11.8	Breakdown Torque		56.3 LB-FT		
R.P.M.		3490	Pull-up Torque		17.7 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		23.8 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		78.5 A
Service Factor (S.F.)		1.15		No-load Current		3.65 A	
NEMA Nom. Eff.		90.2	Power Factor	87	Line-line Res. @ 25°C		1.05 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps				Temp. Rise @ S.F. Load		79°C	
				Locked-rotor Power Factor		33.7	
				Rotor inertia		0.273 LB-FT2	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	60	80	87	90	90	90	90
Efficiency	88	91.4	91.3	90.5	89.5	88.2	89.9
Speed	3576	3551	3525	3497	3465	3429	3478
Line amperes	4.55	6.56	8.97	11.6	14.5	17.7	13.3

ABB Motors and Mechanical Inc.

WINDING # 07WGY855

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3490 RPM 460 V 0730M

TORQUES (LB-FT) : PO=56.3 PU=17.7 LR=23.8 LRA=78.5





