

ABB BALDOR RELIANCE III

Customer information packet

EHM4104T

30HP, 1770RPM, 3PH, 60HZ, 286T, 1060M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
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	30.000 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	CSA CSA EEV 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	76.000 A @ 230.0 V 78.000 A @ 208.0 V 38.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
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.	10H756
Base	
Status	PRD/A
Elec. spec.	10WGY648
Layout	10LYH756
Eff. date	07-10-2024
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	12-12-2011

Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1060M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.76 IN
Power Factor	79
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	Mounting Provisions Only
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP2138L																	
CAT.NO.	EHM4104T				P/N						ENCLOSURE		TEFC				
SPEC.	10H756Y648G1			CC	010A		FRAME		286T		S/N						
HP	30				CLASS		F		HZ		60						
RPM	1770				PH	3		DES		A							
VOLT	230/460								KVA-CODE		J		ODE BRG		6309	DE BRG	6311
AMP	76/38																
RATING	40C AMB-CONT				GREASE		POLYREX EM										
NEMA-NOM-EFF	93.6	PF	79	SER.F.		1.15											
HTR-VOLTS	HTR-AMPS																

AC Induction Motor Performance Data

Record # 53027

Typical performance - not guaranteed values

Winding: 10WGY648-R002			Type: 1060M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		30	Full Load Torque		88.9 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		76/38	Breakdown Torque		314 LB-FT		
R.P.M.		1770	Pull-up Torque		151 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		172 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		274 A
Service Factor (S.F.)		1.15	No-load Current		19.3 A		
NEMA Nom. Eff.		93.6	Power Factor	79	Line-line Res. @ 25°C		0.182 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		55°C
S.F. Amps					Temp. Rise @ S.F. Load		66°C
					Locked-rotor Power Factor		32
					Rotor inertia		4.77 LB-FT2

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	70	79	81	82	80
Efficiency	90	93.4	94.2	94.3	93.8	93.2	94
Speed	1795	1789	1783	1777	1771	1763	1773
Line amperes	21	25.5	32.1	37.6	46.3	54.8	42.8

ABB Motors and Mechanical Inc.

WINDING # 10WGY648

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1770 RPM 460 V 1060M

TORQUES (LB-FT): PO=314 PU=151 LR=172 LRA=274





