

ABB BALDOR RELIANCE III

Customer information packet

EM4103T-12

25HP, 1775RPM, 3PH, 60HZ, 284T, 1054M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	284T
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	25.000 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	62.000 A @ 230.0 V 64.000 A @ 208.0 V 31.000 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	K
Type	AC
Mech. spec.	10L62
Base	
Status	PRD/A
Elec. spec.	10WGZ696
Layout	10LYL062
Eff. date	06-27-2024
CD Diagram	CD0104
Poles	04
Leads	12#10
Proprietary	False
Created date	10-23-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	31.0 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	12 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1054M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.63 IN
Power Factor	81
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	Shaft 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

NP3443L												
CAT.NO.	EM4103T-12			CUST. P/N							ENCL	TEFC
SPEC.	10L062Z696	CC	010A	FRAME	284T	SER.NO.						
HP	25		CLASS	F	HZ	60						
R.P.M.	1775		PH	3	DES	A						
VOLTS	230/460			CODE	J	ODE BRG		6309	DE BRG	6311		
AMPS	62/31											
RATING	40C AMB-CONT		NEMA NOM. EFF.			93.6		GREASE		POLYREX EM		
P.F.	81	SER.F.	1.15	VPWM INVERTER READY								
HTR-VOLTS	HTR-AMPS		HTR-WATTS									

AC Induction Motor Performance Data

Record # 67498

Typical performance - not guaranteed values

Winding: 10WGZ696-R001			Type: 1054M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: Run Connection					
Rated Output (HP)		25	Full Load Torque		74.02 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		62/31	Breakdown Torque		262 LB-FT			
R.P.M.		1775	Pull-up Torque		118 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		142 LB-FT		
NEMA Design Code		A	KVA Code	J	Starting Current		223 A	
Service Factor (S.F.)		1.15	No-load Current		13.6 A			
NEMA Nom. Eff.		93.6	Power Factor		81	Line-line Res. @ 25°C		0.2345 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		51°C	
S.F. Amps			Temp. Rise @ S.F. Load		61°C			
			Locked-rotor Power Factor		30.6			

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	81	84	85	83
Efficiency	88.3	92.8	93.9	94	93.7	93.1	93.8
Speed	1794.1	1789.3	1783.5	1777.8	1770.8	1763.8	1774
Line amperes	15.3	19.3	24.6	30.6	37.2	44.5	34.6

ABB Motors and Mechanical Inc.

WINDING # 10WGZ696

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1775 RPM 460 V 1054M

TORQUES (LB-FT): PO=262 PU=118 LR=142 LRA=223





