

ABB BALDOR RELIANCE III

Customer information packet

EM2555T-12

100HP, 1780RPM, 3PH, 60HZ, 404T, 4484M, OPSB, F

Specifications

Enclosure	OPSB
Frame	404T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	100.000 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	NEMA PREMIUM NEMA PREMIUM (OLD LOGO) CURUSEEV
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	118.000 A @ 460.0 V 236.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
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	118.0 a
Insulation Class	F

Part Detail

Revision	S
Type	AC
Mech. spec.	44E192
Base	
Status	PRD/A
Elec. spec.	44WGW316
Layout	44LYE192
Eff. date	10-31-2024
CD Diagram	CD0104
Poles	04
Leads	12#4
Proprietary	False
Created date	08-06-2010

Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 4 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4484M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	36.97 IN
Power Factor	83
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	2.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1780 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.	EM2555T-12			P/N					ENCLOSURE			OPSB
SPEC.	44E192W316		CC	010A	FRAME		404T	S/N				
HP	100			CLASS		F	HZ	60				
RPM	1780			PH	3	DES		A				
VOLT	230/460			KVA-CODE			H	ODE BRG	6312	DE BRG	6316	
AMP	236/118											
RATING	40C AMB-CONT			GREASE			POLYREX EM					
NEMA-NOM-EFF	95.4	PF	83	SER.F.	1.15							
	50Hz 100Hp 190/380V 278/139A					SF 1.0						
HTR-VOLTS	HTR-AMPS											

AC Induction Motor Performance Data

Record # 32036

Typical performance - not guaranteed values

Winding: 44WGW316-R001				Type: 4484M		Enclosure: OPSB	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		100		Full Load Torque		295 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		236/118		Breakdown Torque		884 LB-FT	
R.P.M.		1780		Pull-up Torque		375 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		498 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		852 A	
Service Factor (S.F.)		1.15		No-load Current		46.4 A	
NEMA Nom. Eff.		95.4	Power Factor	Line-line Res. @ 25°C		0.045551 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		47°C	
S.F. Amps				Temp. Rise @ S.F. Load		57°C	
				Locked-rotor Power Factor		25.3	
				Rotor inertia		15.9 LB-FT2	

Load Characteristics 460 V, 60 Hz, 100 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	70	79	83	85	86	84
Efficiency	92.6	95.3	95.7	95.6	95.2	94.6	95.4
Speed	1794	1789.8	1785.5	1780.7	1775.5	1769.8	1778
Line amperes	54.2	70.6	92.8	118	145	173	134

ABB Motors and Mechanical Inc.

WINDING # 44WGW316

Typical performance - not guaranteed values.

100 HP 3 PH 60 HZ 1780 RPM 460 V 4484M

TORQUES (LB-FT): PO=884 PU=375 LR=498 LRA=852





