

ABB BALDOR RELIANCE III

Customer information packet

EM2531T-12

25HP, 1770RPM, 3PH, 60HZ, 284T, 4046M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	284T
Frame Material	Steel
Frequency	60.00 Hz
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	30.000 A @ 460.0 V 60.000 A @ 230.0 V
Design Code	B
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
Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 a
Insulation Class	F

Part Detail

Revision	W
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX794
Layout	40LYG048
Eff. date	09-02-2025
CD Diagram	CD0104
Poles	04
Leads	12#10
Proprietary	False
Created date	01-22-2013

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No 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	4050M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.06 IN
Power Factor	82
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	No Slinger
Speed	1770 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

NP3554LUA											
CAT.NO.	EM2531T-12			P/N						ENCL	OPSE
SPEC.	40G048X794	CC	010A	FRAME		284T	SER.NO.				
HP	25		CLASS		F	HZ	60				
RPM	1770		PH	3	DES		B				
VOLTS	230/460			CODE		G	ODE BRG	6309	DE BRG	6311	
AMPS	60/30										
RATING	40C AMB-CONT		NEMA-NOM-EFF			93.6	GREASE	POLYREX EM			
PF	82	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)							
USABLE AT	50HZ 25HP 190/380V 72/36A				SF 1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 41055

Typical performance - not guaranteed values

Winding: 40WGX794-R001			Type: 4050M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		25	Full Load Torque		74.1 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		60/30	Breakdown Torque		199 LB-FT	
R.P.M.		1770	Pull-up Torque		86.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		118 LB-FT
NEMA Design Code		B	KVA Code	Starting Current		184 A
Service Factor (S.F.)		1.15	No-load Current		12.2 A	
NEMA Nom. Eff.		93.6	Power Factor	Line-line Res. @ 25°C		0.315 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		28°C
S.F. Amps				Temp. Rise @ S.F. Load		35°C
				Locked-rotor Power Factor		33
				Rotor inertia		3.96 LB-FT2

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	70	79	83	84	84	84
Efficiency	89.7	93.5	94	93.9	93.4	92.4	93.6
Speed	1793	1787	1780	1773	1764	1755	1768
Line amperes	13.9	18.2	23.7	30.1	37.1	44.9	34.3

ABB Motors and Mechanical Inc.

WINDING # 40WGX794

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1770 RPM 460 V 4050M

TORQUES (LB-FT): PO=199 PU=86.8 LR=118 LRA=184





