

ABB BALDOR RELIANCE III

Customer information packet

VEM2531T

25HP, 1775RPM, 3PH, 60HZ, 284TC, 4050M, ODP, F1

Specifications

Enclosure	ODP
Frame	284TC
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	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	64.000 A @ 208.0 V 60.000 A @ 230.0 V 30.000 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 a
Insulation Class	F

Part Detail

Revision	D
Type	AC
Mech. spec.	40L071
Base	
Status	PRD/A
Elec. spec.	40WGX806
Layout	40LYL071
Eff. date	06-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	02-10-2021

Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4050M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.71 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
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.	VEM2531T			P/N			ENCL			ODP
SPEC.	40L071X806G1	CC	010A	FRAME		284TC	SER.NO.			
HP	25		CLASS		F	HZ	60			
RPM	1775		PH	3	DES		A			
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 # 86832

Typical performance - not guaranteed values

Winding: 40WGX806-R003			Type: 4050M		Enclosure: ODP	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		25		Full Load Torque		73.81 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		60/30		Breakdown Torque		232 LB-FT
R.P.M.		1775		Pull-up Torque		116 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		133 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		192 A
Service Factor (S.F.)		1.15		No-load Current		12.6 A
NEMA Nom. Eff.		93.6	Power Factor	Line-line Res. @ 25°C		0.35407 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		28°C
S.F. Amps				Temp. Rise @ S.F. Load		34°C
				Locked-rotor Power Factor		35

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	82	85	85	84
Efficiency	89.4	93.1	93.8	93.6	93	92.1	93.2
Speed	1794.8	1789.5	1783.7	1777.6	1771	1763.2	1774
Line amperes	14.5	18.6	24.1	30.3	37.2	44.6	34.4

ABB Motors and Mechanical Inc.

WINDING # 40WGX806

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1775 RPM 460 V 4050M

TORQUES (LB-FT): PO=232 PU=116 LR=133 LRA=192





