

Crown Triton - IEC Metric

Premium Efficiency Severe Duty Motor

CROWN TRITON-IEC METRIC motor line is engineered for severe duty applications that requires IEC mounting dimension.

It features the highest efficiency through FEM, CFD and HARMONIC analysis, and low noise and low vibration by optimized structural design.



Standard Features

- NEMA Premium Efficiency@60Hz, IEC IE3 Efficiency @50Hz
- Class B Temperature Rise
- Magnet wire and insulation systems meets NEMA MG-1 Part 31
- Suitable for Inverter use, 10:1CT, 20:1VT, meets NEMA MG-1 Part31
- Totally Enclosed Fan Cooled
- NEMA Design B Torque@60Hz (LRC in accordance with IEC Design N)
- IEC Design N@50Hz
- Service Factor
 - 1.15@60Hz,Sine Wave Power; 1.0@VFD Power
 - 1.0@50Hz
- Top mounting(F3) conduit box
- FF-Flange and FT-Flange kits available for B35 and B34
- IP55 Protection
- Cast Iron Frame, End Brackets, Main Conduit Box (except 80M frame)
- Steel Fan Cover
- CSA Certificate for Class I, Div. 2, Groups A,B,C&D, T3
- 3 Year Warranty

Product Range

- **HP** : 1 to 250HP
- **Frame** : 80 ~ 315
- **RPM** : 1200/1800/3600
- **Voltage** :
 - Fr.80 – 132 (9 Leads with Terminal block except 80fr.)
: 230/460@60Hz, 190/380~415V@50Hz
 - Fr.160 and above (6 Leads with Terminal block)
: 460@60Hz, 190/380~415V@50Hz

Applications

- Pumps
- Fans
- Conveyors
- Compressors
- Mixers
- Any application that requires IEC Mounting

Product Features (Basic)

Frame		80-315
HP		1 HP-250 HP
Speed (RPM)		3600, 1800, 1200
Hz & Voltage (Dual Frequency Design)		60Hz : 230/460V(FR.80~132), 460V(FR.160~315)
		★ 50Hz : 190/380V~415V
Mounting	Foot Mount (B3)	★ Foot drilled hole(s) to accommodate mounting flexibility, Dual-drilled holes for multi-mounting capability
	Flange with Foot (B35 & B34)	★ FF-Flange and FT-Flange(FR.80~132) with foot, Dual-drilled holes for multi-mounting capability
	Flange without Foot (B5)	FF-Flange without foot(FR.80~280)
Enclosure / Protection		TEFC / IP55
Rotation	Bi-directional	Fr.80-250 Fr.280-315 4P/6P
	Uni-directional	Fr.280-315 2P
Painting		Polyurethane top coat (PANTONE 279C)
Ambient Temperature		40°C
Insulation Class		★ F(Impregnation Resin & Magnet wire : Class H)

Product Features (Details)

Starting Method	Sine Wave Power		1.15 Service Factor & B Temp. rise
	Inverter Duty 10:1 VT		1.0 Service Factor & F Temp. rise
	Inverter Duty 20:1 VT (at 50% load)		1.0 Service Factor & F Temp. rise
	Inverter Duty 10:1 CT		1.0 Service Factor & F Temp. rise
	Inverter Duty 10:1 CT (1 Hour duty)		1.0 Service Factor & F Temp. rise Fr. 160-315
	Inverter Duty 4:1 CT		1.0 Service Factor & F Temp. rise Fr. 160-315
Material	Constant HP		CHP up to 1.5 times base speed
	Frame	Cast iron	
	Rotor	Aluminum die casting	
	End-shield	Cast iron	
	Fan	Non-sparking conductive plastic fan	
Bearing	Fan cover	Steel	
	Drive end	Ball Bearing	Regreasable (160-315)
	Non-Drive end	Ball Bearing	Regreasable (160-315)
	Protection	V-seal	
Shaft	Lubrication	Polyrex EM Grease	
	Material	AISI1045	
	DE threaded hole	Applied	
	DE Keyway	Opened keyway	
Terminal Box	Material	Cast Iron	
	Cable hole plug	Plastic	
Lead Cable	Number of lead wire(s)	★	9 Leads Fr. 80-132
	Number of lead wire(s)	★	6 Leads Fr. 160-315
Drain Plug	Frame	Both sides of frame bottom	
	Box	None	
	Grease outlet	Applied (Fr. 160-315)	
Certification	CSA	Class I, Division 2, Groups A, B, C & D	
		Class II, Division 2, Groups E, F & G	
		Premium Efficiency (CSA C-390)	
	DOE	Department of Energy Efficiency Certification #CC038A	
	UL	Recognized Motor Components (E211828)(Fr.80~280)	
Name Plate	Markings	Recognized Insulation Materials (E210479)(Fr.80~280)	
		CE Declaration of Conformity (EN 60034-1)	
	Material	★	CSA ,CC(DOE), UL Recognized, CE
			Stainless Steel AISI304

※ Note : Features marked with a star (★) are Key Features for IEC Metric Motors.

