



Quality-Assured Motors For Every Nuclear Application





Why Baldor?



For nearly 100 years, Baldor has strived to provide customers with the best value and reliability in industrial electric motors. That kind of dedication results in satisfied customers and a strong preference for Baldor•Reliance motors, as the chart above shows. Here are just a few of the things Baldor does to earn such recognition:

Baldor offers the industry's broadest line of stock

products. Save valuable time with just one call to Baldor. We offer more than 10,000 stock motors, drives and gearboxes.

Energy-efficiency leader. Baldor began lowering the energy consumption of our motors in the 1920's, long before others were even talking about it. Today, Baldor's expansive line of Premium Efficiency motors extends from 1 through 15,000 Hp. Baldor's motors offer customers the highest overall efficiency levels in the industry, including Baldor•Reliance Super-E[®] (1 through 500 Hp) motors that exceed NEMA Premium[®] efficiencies.



Baldor products are available at more locations than any other brand. Our 35 district offices across North America and offices around the world, offer immediate availability of Baldor products and support to

thousands of customers.

Continuous innovation to improve reliability. Baldor leads the motor industry in applying new technologies to improve motor reliability. Recent improvements to the line of Severe Duty motors are further proof that Baldor is the leader in motors for process industry applications.

Industry's shortest lead times/Flexible manufacturing. Baldor has the industry's shortest lead times on custom Motors. Our unique LEAN FLEX FLOW[™] manufacturing process lets us



produce any order in any quantity, quickly and efficiently.

Industry's best access to information. Only Baldor offers customers so many choices for product information with a wide variety of catalogs and product brochures, the Baldor Web site at www.baldor.com, or you may talk to a Baldor customer service person at one of our sales offices.

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The Widest Selection Of World-Class Motors For Nuclear Applications

For over 90 years, the Reliance brand name has been synonymous with reliability. Reliance nuclear motor designs have been field-proven around the world in commercial nuclear utilities and radioactive waste facilities with the most stringent requirements. Our nuclear motors have proven themselves in type test after type test.

As a leading global manufacturer of high-quality motors, Baldor offers the widest selection of nuclear motors available from a single source. Our product line encompasses over 250,000 ratings, types, styles, and sizes – from fractional through 15,000 HP – including AC motors designed to run with the most advanced adjustable speed technology.

In addition to continuous-duty, three-phase, squirrel-cage AC induction motors, we offer a full range of specialty motors and specialized construction features, including:

- Intermittent duty
- Vertical hollow shaft (Above NEMA)
- Specialized mounting
- NEMA Premium® Efficiency electrical designs

Our capabilities extend to researching and developing customized design solutions for critical applications. From standardized to highly-engineered motors, we offer solutions for virtually every ¼ HP to 15,000 HP nuclear motor requirement.

Unlimited Performance

Whether you are operating in a Class 1E Safety-Related Harsh or Mild Environment, or require radiation-resistant motors for operation in a non-Class 1E commercial or industrial application, Baldor has the motor that you require. We offer a comprehensive selection of motors to meet your specifications. There are Reliance-brand nuclear motors driving pumps, fans, compressors, and motorized valve actuators in nuclear power plants across the United States, Canada, Europe, and Asia.

Also, Reliance nuclear motors support industrial operations, such as nuclear waste cleanup and nuclear fuel reprocessing procedures. When you chose Reliance nuclear motors, you can be sure that every motor component, from the motor hardware to the rotor and stator, will be 100% in compliance with your specification and the requirements of the IEEE and NUREG standards governing nuclear power plants.

Our nuclear motors are designed and manufactured to meet the specific requirements of your environment, including:

Mild or Harsh Enviro	nment Qualification
IEEE 323, 1974, 1983	IEEE 334, 1974, 1994
IEEE 344, 1975, 1987	IEEE 11 7
IEEE 429	NUREG 0588 REV1

Quality Assurance											
ISO 9001	10CFR50, Appendix B										
ASME/ANSI NQA-1	CSAZ299.1										
ANSI N45.2	10CFR21										

Other Application-Specific Requirements

Reliance nuclear motors are designed to meet the specific requirements found in specifications developed by nuclear power plants and nuclear fuel reprocessing facilities. Each specification is reviewed to determine normal and extraordinary operating and environmental conditions, radiation exposure levels, and LOCA (Loss of Coolant Accident) or other incident environments. This information is provided to Design Engineering to insure that the motor for the specific application is sized and designed to meet all of the environmental and operating conditions over the qualified life (40 years in most power plants) of the motor.

When required, Seismic Response Data and Curves are provided by the nuclear facility to enable Engineering to mechanically design a motor that will withstand the earthquake stresses that the facility may be subject to. A Seismic Analysis, either static or dynamic, is then performed to determine that the design will meet the specified requirements. The analysis performed meets the requirements of IEEE 344-1975, 1987.

Harsh Environment Motors

Reliance nuclear insulation systems, both the type H/RH random wound and the F-RBI form wound systems, have been qualified by rigorous accelerated life testing under severe high temperature conditions, high humidity tests, accelerated radiation endurance testing, and mechanical stress testing. These qualification tests were conducted on both "motorette" components and on complete motors. Based on the results of this testing, both of these insulation systems are qualified for a total integrated radiation dosage of up to 2 X 10⁸ Rads over a 40-year life, with a 60-year life at reduced operating temperatures.

It is the performance and results of this testing that form the basis for the Environmental Qualification Report that is prepared and submitted with each Class 1E Safety-Related nuclear motor.

Mild Environment Motors

Baldor offers a line of Class 1E motors in NEMA and most IEC frame sizes that meet the IEEE 334-1994 definition for a Mild Environment Product, with a total integrated radiation dosage of $< 1 \times 10^4$ Rads over a 40-year Design Life. These motors have a Class H insulation system with VPI encapsulated windings for extended thermal life. Standard features include Severe Duty construction, Neoprene gaskets and seals, and a non-metallic, low-loss fan design to reduce friction and windage losses. A wide range of modifications and accessories are available.

These motors are completely manufactured and tested under our 10CFR50, Appendix B Nuclear QA program. Available software documents include a Seismic Analysis, Certificate of Compliance, Routine Test Report, and a Mild Environmental Qualification (EQ) Report.

Unlimited Quality Assurance

Baldor uses advanced manufacturing techniques and continuous quality improvement procedures to ensure worldclass standards of quality with the ultimate goal of customer satisfaction. The ISO certification process and 10CFR50 Appendix B audits are an integral part of everything we do, from motor design and manufacture through documentation and post-order support.

As part of our long-standing commitment to the nuclear industry, Baldor offers extensive in-house testing to ensure consistent "to spec" performance. Comprehensive documentation capabilities fully support the specification requirements of every nuclear application, no matter how small. Specialized engineering studies are also available.

Quality Control Checklist for Nuclear Motors

- All critical components are 100% inspected and dimensionally checked against parts drawings, with all measurements recorded.
- Samples of all materials such as wire, insulation, and fasteners are destructively tested.
- Every manufacturing step is verified and recorded.
- Processes such as dip and bake and VPI are quality-controlled.
- Resins and varnishes are tested daily or before each application.
- Ovens are calibrated, with baking times and temperatures recorded.



Horizontal cast iron motor for belted fan applications



Large AC vertical TEWAC pump motor



Horizontal fabricated frame motor for large pump applications





Reliance Class F Type RBI Form Wound VPI sealed insulation systems are tested and proven to meet the most stringent application requirements, including IEEE 429 and nuclear Class 1E service.



Cross-Sectional View



Typical Wire Reliance Class H Type RH Random Wound insulation systems are qualified for nuclear Class 1E service.

Class F Type RBI Form Wound Insulation System

For Medium To High Voltage Applications From 460-6,900 Volts

- "Green" coils are surge tested per IEEE 522 to verify the avoidance of turn-to-turn shorts.
- After VPI, stators are immersion tested per IEEE 429, to ensure underwater performance.
- Systems must demonstrate the ability to withstand surges as high as 0.2 microsecond rise time.

Class H Type RH Random Wound Insulation System

For Low Voltage Applications Up To 600 Volts

- Coil heads are laced and taped.
- Lead connections are brazed and insulated.
- Varnish resists high temperatures and high radiation.
- Stator is dipped and baked three times, while being rotated 180° between dips, to ensure full, even coverage of coil heads.
- The lead cable used has the same thermal and radiation rating as the insulation system.



Baldor Above NEMA Motor Capabilities Overview

The reach of Baldor's Above NEMA Motor product offering is vast. It extends well beyond NEMA frames to ratings as high as 15,000 Hp and as low as 300 RPM. This includes an extensive range of proven cast iron and fabricated steel motors well suited for both General Purpose and nuclear service applications.

Note the following charts which apply to motors meeting these NEMA standards:

Enclosures: TEFC & TEAAC

- 650% Inrush current
- Equal or greater than NEMA, Part 20 design torques (as described by NEMA for Above NEMA Motors)
- Standard NEMA voltage for each horsepower rating

- Minimum 90% Reduced Voltage Start
- NEMA specified (or less) load inertia applied to the motor shaft

- Inverter powered capabilities limited to Variable Torque loads
- Altitude below 3300 feet (above sea level)
- Operating ambient of 40°C (or lower)
- · Horizontal foot mounted
- Centrifugal loads
- Direct coupled

The list of Baldor•Reliance Custom nuclear motor design capabilities and features is even more impressive. Please contact a Baldor office for details.



Enclosures: ODP, WPI, WPII, TEWAC & TEFV

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400 Cast Frames Image: Cast Frames <	350														
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7000	7000														
8000	8000														
9000	9000														
0000	0000														
2000	2000														
5000	5000														

Important Notes:

• Fabricated frames will be TEAAC enclosure.

· In many cases, fabricated frames utilize an enhanced cooling blower package to reduce noise levels.

Important Notes:

- Application conditions outside of "NEMA" standards may move a rating to a different frame size.
- 1750 Hp to 2500 Hp 3600 RPM will normally be a cast frame rating, unless there is a requirement for "stiff shaft" design.
- Enhanced cooling blower systems (provided on the motor) may be required at the top end of a frame size.

Standard Motor Construction - NEMA Frame Sizes

	lass 1E Safety	Related Motor	Family											
Harsh Environment Mild Environment HP Range - Standard 25, 75 25, 2,0 50, 250 25, 75 25, 2,0														
HP Range - Standard	.2575	.25-2.0	.50-250	.2575	.25-2.0	.50-250								
	Electr	ical Features												
NEMA Frame Sizes	48/56	143T-145T	182T-449T	48/56	143T-145T	182T-449T								
Premium Efficiency Winding Designs (XE)	S	S	S	S	S	S								
Radiation-resistant Insulation System	S	S	S	-	-	-								
Class H Insulation System	-	-	-	S	S	S								
Multiple Dip & Bake Process	S	S	S	-	-	-								
VPI Encapsulated Windings	-	-	-	S	S	S								
Class B Temperature Rise @ 1.0 SF	S	S	S	S	S	S								
Class F Temperature Rise @ 1.15 SF	S	S	S	S	S	S								
Inverter Spike Resistant Insulation System	S	S	S	S	S	S								
1.15 Service Factor	S	S	S	S	S	S								
Mechanical Features														
NEMA Frame Sizes	48/56	143T-145T	182T-449T	48/56	143T-145T	182T-449T								
TEFC-XT or TENV-XT Enclosure	S	S	-	S	S	-								
TEFC-XT Enclosure	-	-	S	_	-	S								
Steel Frame, Cast iron endplates, steel fan cover	S	-	-	S	-	-								
Cast Iron Frame, Cast iron endplates & fan cover	-	S	S		S	S								
Plated Steel Conduit Box	S	-	-	S	-	-								
Cast Iron Conduit Box	-	S	S	_	S	S								
Viton Gaskets	S	S	S	-	-	-								
Neoprene Gaskets	-	-	-	S	S	S								
Bronze External Cooling Fan	S	S	S	-	-	-								
Non-metallic External Cooling Fan	-	-	-	S	S	S								
Double-Shielded Ball Bearings	S	S	-	S	S	-								
Open Ball Bearings - PLS	-	-	S	-	-	S								
Grease Inlet with Screw-in Plug	S	S	-	S	S	-								
Grease Inlet with Tube Extension & grease fitting	-	-	S	-	-	S								
Grease Outlet with Screw-in Plug	S	S	-	S	S	-								
Grease Outlet with Tube Extension and Auto Relief	-	-	S	_	-	S								
Chevron SRI-2 or Exxon Polyrex EM Grease	S	S	S	S	S	S								
Stainless Steel Nameplate	S	S	S	S	S	S								
Shaft Slinger, Lip Seal	S	S	-	S	S	-								
Shaft Slinger, Steel	-	-	S	_	-	S								
Automatic, Stainless Steel T-Drain	S	S	S	S	S	S								
Zinc-plated Hex-hd Hardware	S	S	S	S	S	S								
Carbon Steel Shaft Material	S	S	S	S	S	S								
Internal Epoxy Paint	S	S	S	S	S	S								
External Epoxy Paint, Blue-green	S	S	S	S	S	S								



Typical Design Characteristics - Above NEMA

Class 1E Safety Related Motor Family													
	Horizontal	Vertical											
HP Range	200 - 15,000	250 - 8,000											
Speed Range	300 - 3600 RPM	300 - 3600 RPM											
	Electrical Characteristics												
Frame Size Range	E5006 - 10840	V5008 - V10840											
Voltage, Frequency	4,000 - 6,900 V, 50 & 60 Hz	4,000 - 6,900 V, 50 & 60 Hz											
Service Factor	1.0, 1.15	1.0, 1.15											
Torque Characteristics	NEMA Design B	NEMA Design B											
Ambient Temperature	40 C	40 C											
Windings	Form wound copper, non-hydroscopic epoxy resin, multiple VPI process.	Form wound copper, non-hydroscopic epoxy resin, multiple VPI process.											
Winding Insulation Class	Class F, Type RBI	Class F, Type RBI											
Temperature Rise	Class B @ 1.0 SF	Class B @ 1.0 SF											
Thermal Protection	Winding RTD's with auxiliary conduit box (typical); other types available	Winding RTD's with auxiliary conduit box (typical); other types available											
Testing	Routine Test and Report per IEEE 112 & NEMA MG 1-20.16.2	Routine Test and Report per IEEE 112 & NEMA MG 1-20.16.2											
Lead System	Vulcanized ethylene propylene, ring-type lead lugs.	Vulcanized ethylene propylene, ring-type lead lugs.											
Mechanical Features													
Frame Size Range	E5006 - L10840	V5008 - V10840											
Frame Dimensions	NEMA compliant, IEC compliance available on select TEFC frame sizes only	NEMA Compliant											
Enclosures	ODP, WPI, WPII, TEFC, TEAAC, TEWAC	ODP, WPI, WPII, TEAAC, TEWAC											
Enclosure Construction	Cast Iron though G500 Frame. Fabricated steel on larger motors.	Fabricated Steel											
Rotor Construction	Fabricated Copper Bar	Fabricated Copper Bar											
Foot Mounting Holes	Multiple holes on specified frame sizes	N/A											
Nameplate	Stainless Steel	Stainless Steel											
Slingers & Seals	Shaft Slinger, Steel	Shaft Slinger, Steel											
Gaskets/Elastomers	Viton	Viton											
Hardware	Grade 5, U.S. Standard, zinc dichromate plated, Hex-head	Grade 5, U.S. Standard, zinc dichromate plated, Hex-head											
Grounding	Ground lug in conduit box, grounding pad on frame.	Ground lug in conduit box, grounding pad on frame.											
External Cooling Fan	Bronze (TEFC & certain TEAAC designs)	N/A											
Internal Cooling Fan	Bronze	Bronze											
Bearings	Anti-friction (grease lubricated) or sleeve (oil ring or flooded lubricated)	Various configurations depending upon thrust requirements and application.											
Lubricants	Chevron SRI-2 or Exxon Mobile Polyrex EM Grease / DTE oils	Chevron SRI-2 or Exxon Mobile Polyrex EM Grease / DTE oils											
Balance	Standard Balance exceeds NEMA MG1	Standard Balance exceeds NEMA MG1											
Shaft Material	Cold Rolled Steel, AISI 1040 Class I	Cold Rolled Steel, AISI 1040 Class I											
Paint	Surface preparation (SSPC-SP-6), primer (SSPC- SP-1), top coat (Alkyd Enamel)	Surface preparation (SSPC-SP-6), primer (SSPC- SP-1), top coat (Alkyd Enamel)											
Noise	Varies with design, complies with NEMA MG1. Low noise options available.	Varies with design, complies with NEMA MG1. Low noise options available.											

Frames 182T thru 445TS – NEMA Ratings





Dimensions

TEFC-XT - Three Phase - Cast Iron Construction Totally Enclosed Fan Cooled - NEMA 182T-445TS - Foot Mounted

Frame									Cast Ir		Cast Iron Conduit Box			Box	Aux C/box (2)										Shaft a		Woight
Size (1)	A	D	E	н	0	P	Т	BA	AA	AB	AC	AF	ААХ	LX	PX	C	BS	B	2F	2XF	N	N-W	U	v	Sq.	Lgth	Lbs.
182T	9.00	4.50	3.75	0.44	9.88	9.50	2.00	2.75	1.00	8.44	6.59	2.12	0.75	4.00	7.06	15.62	2.75	7.00	-	4.50	3.00	2.75	1.125	2.50	0.250	1.75	86
L182T	9.00	4.50	3.75	0.44	9.88	9.50	2.00	2.75	1.00	8.44	6.59	2.12	0.75	4.00	7.06	15.62	2.75	7.00	-	4.50	3.00	2.75	1.125	2.50	0.250	1.75	91
184T	9.00	4.50	3.75	0.44	9.88	9.50	2.00	2.75	1.00	8.44	6.59	2.12	0.75	4.00	7.06	15.62	2.75	7.00	5.50	-	3.00	2.75	1.125	2.50	0.250	1.75	116
L184T	9.00	4.50	3.75	0.44	9.88	9.50	2.00	2.75	1.00	8.44	6.59	2.12	0.75	4.00	7.06	15.62	2.75	7.00	5.50	-	3.00	2.75	1.125	2.50	0.250	1.75	121
213T	10.50	5.25	4.25	0.44	11.25	11.00	2.00	3.50	1.00	9.31	7.56	2.12	0.75	4.00	7.06	17.12	3.50	8.50	-	5.50	3.62	3.38	1.375	3.12	0.312	2.38	135
L213T	10.50	5.25	4.25	0.44	11.25	11.00	2.00	3.50	1.00	9.31	7.56	2.12	0.75	4.00	7.06	17.12	3.50	8.50	-	5.50	3.62	3.38	1.375	3.12	0.312	2.38	145
215T	10.50	5.25	4.25	0.44	11.25	11.00	2.00	3.50	1.00	9.31	7.56	2.12	0.75	4.00	7.06	17.12	3.50	8.50	7.00	-	3.62	3.38	1.375	3.12	0.312	2.38	175
L215T	10.50	5.25	4.25	0.44	11.25	11.00	2.00	3.50	1.00	9.31	7.56	2.12	0.75	4.00	7.06	17.12	3.50	8.50	7.00	-	3.62	3.38	1.375	3.12	0.312	2.38	185
254T	12.50	6.25	5.00	0.56	13.25	13.25	2.44	4.25	1.25	10.81	8.81	2.50	0.75	6.31	9.31	24.56	5.00	12.00	-	8.25	4.12	4.00	1.625	3.75	0.375	2.88	335
256T	12.50	6.25	5.00	0.56	13.25	13.25	2.44	4.25	1.25	10.81	8.81	2.50	0.75	6.31	9.31	24.56	5.00	12.00	10.00	-	4.12	4.00	1.625	3.75	0.375	2.88	345
284T	13.75	7.00	5.50	0.56	14.75	14.88	2.44	4.75	2.00	12.62	10.19	3.00	0.75	6.88	10.50	27.44	5.50	13.00	-	9.50	5.00	4.62	1.875	4.38	0.500	3.25	475
284TS	13.75	7.00	5.50	0.56	14.75	14.88	2.44	4.75	2.00	12.62	10.19	3.00	0.75	6.88	10.50	26.06	5.50	13.00	-	9.50	3.62	3.25	1.625	3.00	0.375	1.88	475
286T	13.75	7.00	5.50	0.56	14.75	14.88	2.44	4.75	2.00	12.62	10.19	3.00	0.75	6.88	10.50	27.44	5.50	13.00	11.00	-	5.00	4.62	1.875	4.38	0.500	3.25	490
286TS	13.75	7.00	5.50	0.56	14.75	14.88	2.44	4.75	2.00	12.62	10.19	3.00	0.75	6.88	10.50	26.06	5.50	13.00	11.00	-	3.62	3.25	1.625	3.00	0.375	1.88	490
324T	15.50	8.00	6.25	0.69	16.69	17.00	2.44	5.25	2.00	15.44	11.69	3.62	0.75	8.00	10.50	30.44	6.00	14.75	-	10.50	5.62	5.25	2.125	5.00	0.500	3.88	590
324TS	15.50	8.00	6.25	0.69	16.69	17.00	2.44	5.25	2.00	15.44	11.69	3.62	0.75	8.00	10.50	28.94	6.00	14.75	-	10.50	4.12	3.75	1.875	3.50	0.500	2.00	590
326T	15.50	8.00	6.25	0.69	16.69	17.00	2.44	5.25	2.00	15.44	11.69	3.62	0.75	8.00	10.50	30.44	6.00	14.75	12.00	-	5.62	5.25	2.125	5.00	0.500	3.88	630
326TS	15.50	8.00	6.25	0.69	16.69	17.00	2.44	5.25	2.00	15.44	11.69	3.62	0.75	8.00	10.50	28.94	6.00	14.75	12.00	-	4.12	3.75	1.875	3.50	0.500	2.00	630
364T	17.00	9.00	7.00	0.69	18.50	19.50	2.94	5.88	3.00	18.00	13.81	4.12	0.75	8.38	11.62	33.44	6.12	15.00	_	11.25	6.25	5.88	2.375	5.62	0.625	4.25	865
364TS	17.00	9.00	7.00	0.69	18.50	19.50	2.94	5.88	3.00	18.00	13.81	4.12	0.75	8.38	11.62	31.31	6.12	15.00	_	11.25	4.12	3.75	1.875	3.50	0.500	2.00	859
365T	17.00	9.00	7.00	0.69	18.50	19.50	2.94	5.88	3.00	18.00	13.81	4.12	0.75	8.38	11.62	33.44	6.12	15.00	12.25	-	6.25	5.88	2.375	5.62	0.625	4.25	890
365TS	17.00	9.00	7.00	0.69	18.50	19.50	2.94	5.88	3.00	18.00	13.81	4.12	0.75	8.38	11.62	31.31	6.12	15.00	12.25	-	4.12	3.75	1.875	3.50	0.500	2.00	884
404T	19.00	10.00	8.00	0.81	21.31	22.50	2.94	6.62	3.00	19.25	15.06	4.12	0.75	9.62	14.44	38.31	6.88	16.00	_	12.25	7.50	7.25	2.875	7.00	0.750	5.62	1220
404TS	19.00	10.00	8.00	0.81	21.31	22.50	2.94	6.62	3.00	19.25	15.06	4.12	0.75	9.62	14.44	35.31	6.88	16.00	_	12.25	4.50	4.25	2.125	4.00	0.500	2.75	1211
405T	19.00	10.00	8.00	0.81	21.31	22.50	2.94	6.62	3.00	19.25	15.06	4.12	0.75	9.62	14.44	38.31	6.88	16.00	13.75	-	7.50	7.25	2.875	7.00	0.750	5.62	1260
405TS	19.00	10.00	8.00	0.81	21.31	22.50	2.94	6.62	3.00	19.25	15.06	4.12	0.75	9.62	14.44	35.31	6.88	16.00	13.75	-	4.50	4.25	2.125	4.00	0.500	2.75	1251
444T	21.00	11.00	9.00	0.81	23.38	25.25	3.25	7.50	3.00	22.19	17.44	4.00	0.75	11.62	15.25	44.62	8.25	19.00	_	14.50	8.94	8.50	3.375	8.25	0.875	6.88	1670
444TS	21.00	11.00	9.00	0.81	23.38	25.25	3.25	7.50	3.00	22.19	17.44	4.00	0.75	11.62	15.25	40.88	8.25	19.00	-	14.50	5.19	4.75	2.375	4.50	0.625	3.00	1654
445T	21.00	11.00	9.00	0.81	23.38	25.25	3.25	7.50	3.00	22.19	17.44	4.00	0.75	11.62	15.25	44.62	8.25	19.00	16.50	-	8.94	8.50	3.375	8.25	0.875	6.88	1860
445TS	21.00	11.00	9.00	0.81	23.38	25.25	3.25	7.50	3.00	22.19	17.44	4.00	0.75	11.62	15.25	40.88	8.25	19.00	16.50	-	5.19	4.75	2.375	4.50	0.625	3.00	1844

Notes: (1) All frames have mounting holes for dual mounting. Frame sized with the "L" designation are not suitable for conversion to F-2 mounting.

(2) Auxiliary terminal boxes supplied only when specified.

Dimensions are in inches.

Drawings shown are for reference only. Please contact Baldor for a detailed dimensional drawing for the specific motor you require.



Frames 445T thru L449TY above NEMA ratings



Dimensions TEFC-XT - Three Phase - Cast Iron Construction Totally Enclosed Fan Cooled - Frames 445T-L449TY - Above NEMA Ratings - Foot Mounted

Frame		D(2)		ш	0	D	-	v	DA	Cas	Cast Iron Cor		Cast Iron Conduit Box			t Iron Conduit Box		st Iron Conduit Box		Cast Iron Conduit Box		ast Iron Conduit Box		Cast Iron Conduit Box		st Iron Conduit Box		t Iron Conduit Box		ast Iron Conduit Box		t Iron Conduit Box		ast Iron Conduit Box		st Iron Conduit Box		Cast Iron Conduit Box		ast Iron Conduit Box		Cast Iron Conduit Box			st Iron Conduit Box		ast Iron Conduit Box		ast Iron Conduit Box		st Iron Conduit Box		st Iron Conduit Box		nduit Box		ron Conduit Box		Conduit Box		nduit Box		ıduit Box		nduit Box		Conduit Box		nduit Box		nduit Box		Conduit Box		ı Conduit Box		t Iron Conduit Box		Iron Conduit Box		ron Conduit Box		nduit Box		DC	в	25			Shaft a	and Key	/		Weight
Size	A	D(2)	E	п	U	r		T	DA	AA	AB	AC	AF		D3	D	26	Ν	N-W	U	V	Sq.	Lgth	Lbs.																																																																						
445T	21.00	11.00	9.00	0.81	23.62	25.25	3.25	-	7.50	4.00	23.44	18.19	7.00	44.63	8.25	19.00	16.50	8.50	8.50	3.375	8.25	0.875	6.91	1860																																																																						
445TS	21.00	11.00	9.00	0.81	23.62	25.25	3.25	-	7.50	4.00	23.44	18.19	7.00	40.87	8.25	19.00	16.50	4.75	4.75	2.375	4.50	0.625	3.03	1860																																																																						
447T	21.00	11.00	9.00	0.81	24.25	25.25	4.25	5.00	7.50	4.00	23.44	18.19	7.00	48.13	10.00	22.50	20.00	8.50	8.50	3.375	8.25	0.875	6.91	2275																																																																						
447TS	21.00	11.00	9.00	0.81	24.25	25.25	4.25	5.00	7.50	4.00	23.44	18.19	7.00	44.37	10.00	22.50	20.00	4.75	4.75	2.375	4.50	0.625	3.03	2275																																																																						
449T	21.00	11.00	9.00	0.81	24.25	25.25	4.25	5.00	7.50	4.00	23.44	18.19	7.00	53.13	12.50	27.50	25.00	8.50	8.50	3.375	8.25	0.875	6.91	2650																																																																						
449TS	21.00	11.00	9.00	0.81	24.25	25.25	4.25	5.00	7.50	4.00	23.44	18.19	7.00	49.37	12.50	27.50	25.00	4.75	4.75	2.375	4.50	0.625	3.03	2650																																																																						
L449T	22.00	11.00	9.00	0.81	24.25	27.25	4.25	12.00	16.00	4.00	23.38	18.12	6.50	60.13	4.50	34.50	25.00	8.06	8.06	3.375	8.06	0.875	6.88	4000																																																																						
L449TS	22.00	11.00	9.00	0.81	24.25	27.25	4.25	12.00	12.25	4.00	23.38	18.12	6.50	56.38	4.50	34.50	25.00	4.31	4.31	2.375	4.31	0.625	3.00	4000																																																																						
L449TY	22.00	11.00	9.00	0.81	24.25	27.25	4.25	12.00	16.00	4.00	23.38	18.12	6.50	60.13	4.50	34.50	25.00	8.06	8.06	3.875	8.06	1.000	6.88	4000																																																																						

Dimensions are in inches.

Drawings shown are for reference only. Please contact Baldor for a detailed dimensional drawing for the specific motor you require.

Universal 143T thru 145T TEFC SXT





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