

ABB NXR US 5000 and 5800 frame motors

Designed and Manufactured by ABB



ABB NXR US 5000 and 5800 frame motors continue to be designed and engineered to meet the demands of the North America market, including local support and availability.

We value our North American customers, therefore providing reliable, applicable and easy-to-buy NXR US motors remains one of our top priorities.

Designed for North America

ABB NXR US motors for use in North America are designed and engineered in North America with NEMA frames to meet market needs.

Modified for you

We remain committed to providing you the motor you need when you need it. NXR US motors for the North America market are available from a North American stocking location with standard features to allow for modified-to-order capability at competitive lead times.

Working with your local sales teams and North America based ABB application engineers, ABB's modified-to-order capability enables you to add the modifications to meet your application needs.

Made by ABB

ABB has been manufacturing industrial electric motors for more than 125 years and this experience is built into every ABB high voltage induction motor. Every NXR motor is designed with cost-efficient, standardized designs to be safe, energy efficient and reliable.

Supported in North America

Local people and expertise remain at the core of our offering. ABB NXR US motors are supported by a dedicated sales force and application engineering team in North America to ensure we are always taking care of you.



Dedicated salesforce

ABB's dedicated Large AC salesforce is located throughout North America to work with you on your large motor needs.



Application engineering

Local engineering teams with deep application knowledge ensure proper design and motor selection.



ABB Services

Local certified ABB service technicians and authorized service repair facilities are there for the lifecycle of your motor, to reduce unplanned downtime and extend equipment life.



Training

ABB offers on-site, classroom and online training.

Designed for you - Made by ABB

Buying low and medium voltage motors has never been easier. ABB's NXR US general purpose motors combine cost-efficient standardized designs and short lead times with safety, productivity, energy efficiency and reliability.

ABB NXR US motors up to 1000 Hp are stocked in the US with the following features:

- Stock completed motors 460V and 2300/4000V
- 2-6 pole
- 7x 100 ohm platinum winding RTDs (2/phase + spare)
- Provisions for bearing RTDs
- Corrosion-resistant paint protection on interior metal surfaces
- Cast iron frame and end brackets
- 0.005" foot flatness
- Insulated ODE bearing and brackets
- Stainless steel hardware - ANSI
- Class F insulation
- Service Factor of 1.15 DOL
- 3.5 PU surge capability
- Suitable for use on a VSD, 10:1 VT / 2:1 CT (1000:1 CT safe area with TEBC modification)
- CSA approval Class 1 Div II (Class 2 with mods)
- IP54 - Standard - IP55 with Mod
- Coil head space heaters
- Stock brackets, caps, lead channels and NEMA MTBs
- NEMA 4X auxiliary box for accessories
- Performance data, drawings and other information is readily available

ABB's modified-to-order capability enables you to add the modifications to meet your application needs.

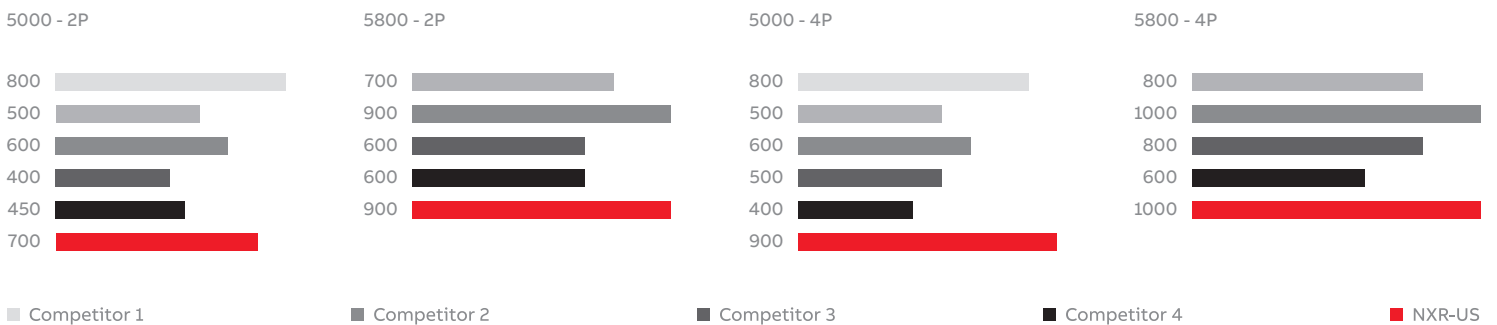
ABB NXR US modifications are completed in our Athens, GA USA factory. The Athens facility will continue to expand the modification capabilities offering to meet your needs.

Available modifications:

- ABB Ability Smart Sensor for motors
- Standard NXR rerates
- Bearing changes – Ball to roller
- Bearing RTDs
- Blower cooling
- Shaft ground for non-CSA motors
- Provisions or accessories for vibration monitoring
- Modifiable MTB positions – F2, F3, oversized boxes, accessories
- Shaft seals- labyrinth, Inpro
- D-flange/C-face
- Arctic Duty (-40°C)
- Thermostats
- Export crating
- IEEE-841 features
- Routine/complete testing
- Shaft modifications
- Insulated DE bearing
- Add encoder

Max rating (Hp)

NXR-US includes 460V



High power density for compact installations

The NXR US sets a benchmark for the industry, offering more horsepower per pound than has ever been achieved before with rib cooled motors. High power density means that for a given output you can often use a motor one frame size smaller than with conventional products. This helps to save space and enables more compact installations.

All ABB NXR US motors are designed to match customer needs and requirements for quality, safety and dependability.



Modified-to-order capability allows for application specific offerings



Global supply chain with localized support



Patented internal cooling allows for more power per pound



Installation made easy due to flexible foundations and simple lead connections



Modified to order above NEMA motor, type NXR US

Technical data

Modified to order above NEMA motor, type NXR US, three phase, totally enclosed, foot mounted
460 V, 60 Hz

Hp	RPM	NEMA frame	Encl.	Reference number	Aprx. wt. (lb)	Full load efficiency	Voltage	FL amps
460 V 60 Hz								
250	1200	5008	TEFC	MTO-N50256L-4	3550	95.8	460	301
300	1200	5010	TEFC	MTO-N50306L-4	4010	95.8	460	361
350	1200	5010	TEFC	MTO-N50356L-4	4230	95.8	460	412
400	1200	5010	TEFC	MTO-N50406L-4	4340	95.8	460	478
	3600	5010	TEFC	MTO-N50452S-4	3950	95.8	460	471
450	1800			MTO-N50454L-4	4100	96.2		503
500	1200	5012	TEFC	MTO-N50456L-4	4740	95.8	460	538
	3600	5010		MTO-N50502S-4	4010	95.8		522
	1800			MTO-N50504L-4	4280	96.2		554
600	1200	5012	TEFC	MTO-N50506L-4	4980	95.8	460	595
	3600	5010		MTO-N50602S-4	4210	95.8		623
	1800			MTO-N50604L-4	4480	96.2		659
700	1200	5012	TEFC	MTO-N50606L-4	5250	95.8	460	728
	3600	5010		MTO-N50702S-4	4610	95.8		725
	1800			MTO-N50704L-4	5160	96.2		766
800	1200	5012	TEFC	MTO-N50706L-4	5670	95.8	460	823
	3600	5810		MTO-N58802S-4	7360	95.8		828
	1800	5012		MTO-N50804L-4	5470	96.2		871
900	1200	5810	TEFC	MTO-N58806L-4	7520	95.8	460	908
	3600	5810		MTO-N58902S-4	7870	95.8		927
	1800	5012		MTO-N50904L-4	5670	96.2		980
1000	1200	5810	TEFC	MTO-N58906L-4	7980	95.8	460	1016
	1800	5810		MTO-N581004L-4	8050	96.2		1068
	1200	5810		MTO-N581006L-4	8330	95.8		1124

Modified to order above NEMA motor, type NXR US

Technical data

Modified to order above NEMA motor, type NXR US, three phase, totally enclosed, foot mounted
2300/4000 V, 60 Hz

Hp	RPM	NEMA frame	Encl.	Reference number	Aprx. wt. (lb)	Full load efficiency	Voltage	FL amps
2300/4000 V 60 Hz								
250	1200	5008	TEFC	MTO-N50256L-2340	3530	94.1	2300/4000	65.8/37.9
300	1200	5010	TEFC	MTO-N50306L-2340	3970	94.5	2300/4000	78.2/45.1
	3600	5010		MTO-N50352S-2340	3730	94.5		76.8/44.2
350	1800	5008	TEFC	MTO-N50354L-2340	3510	94.5	2300/4000	84.1/48.5
	1200	5010		MTO-N50356L-2340	4450	94.5		88.3/50.9
400	3600	5010		MTO-N50402S-2340	3900			87.6/50.4
	1800	5010	TEFC	MTO-N50404L-2340	3990	95.0	2300/4000	93.6/54.0
450	1200	5012		MTO-N50406L-2340	4850			100.5/57.9
	3600	5010		MTO-N50452S-2340	4060			98.2/56.5
450	1800	5010	TEFC	MTO-N50454L-2340	4250	95.0	2300/4000	102.7/59.1
	1200	5012		MTO-N50456L-2340	5180			111.6/64.4
500	3600	5010		MTO-N50502S-2340	4210			107.4/61.8
	1800	5012	TEFC	MTO-N50504L-2340	4760	95.0	2300/4000	114.2/65.7
500	1200	5012		MTO-N50506L-2340	5450			122.1/70.3
	3600	5010		MTO-N50602S-2340	4450			129.7/74.6
600	1800	5012	TEFC	MTO-N50604L-2340	5140	95.4	2300/4000	139.5/80.3
	1200	5012		MTO-N50606L-2340	5670			143.8/82.8
700	3600	5810		MTO-N58702S-2340	6680			147.4/84.8
	1800	5012	TEFC	MTO-N50704L-2340	5510	95.4	2300/4000	165.0/95.1
700	1200	5810		MTO-N58706L-2340	7470			161.5/93.0
	3600	5810		MTO-N58802S-2340	7300			167.1/96.1
800	1800	5012	TEFC	MTO-N50804L-2340	5690	95.8	2300/4000	178.5/102.7
	1200	5810		MTO-N58806L-2340	7910			182.6/105.1
900	3600	5810		MTO-N58902S-2340	7670			187.3/107.7
	1800	5810	TEFC	MTO-N58904L-2340	7690	95.8	2300/4000	198.9/114.5
1000	1800	5810	TEFC	MTO-N581004L-2340	8090			220.3/126.7