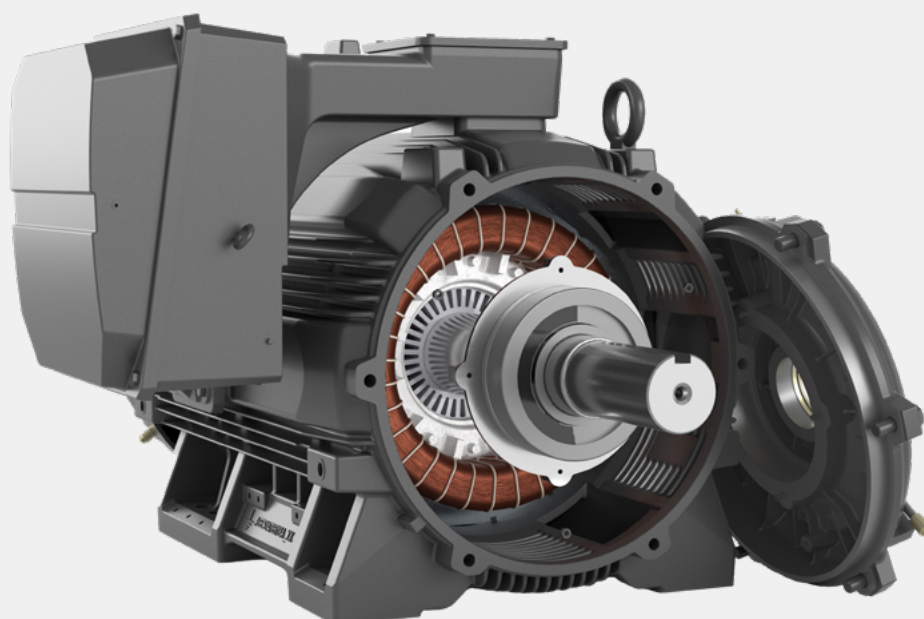


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ABB NEMA MOTORS

# DP200 Crush+

Motors for crusher applications



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The ABB NEMA DP200 Crush+ motor exceeds demands for reliability and safety in the harshest environments, raising the standard of motors used for crushers. Engineered with the user in mind, it delivers high starting and breakdown torque alongside unmatched flexibility and design modularity. Built upon the proven SD200 framework, its rugged and reliable design optimizes performance, efficiency and total cost of ownership. Always with uncompromised safety in mind.

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# ABB NEMA Motors

## DP200 Crush+

Introducing our latest innovation: a high-performance motor engineered for the most demanding environments. Crafted with resilient cast iron, this powerhouse boasts unparalleled mechanical strength. Based on the proven SD200 design, Crush+ is engineered to excel under pressure. Available in a range of 440-580 frame designs, equipped with Class H insulation and IP65

ingress protection, DP200 Crush+ sets the standard for reliability in the toughest operating condition. Plus, with the option for SP4 (NEMA Super Premium® efficiency), you can count on superior performance and energy savings. Experience the difference with our crusher duty motor – where durability meets excellence.



**Fit for purpose: Dedicated solution for crushing and hard-start applications**

Experience unmatched starting and breakdown torque with Crush+, perfect for demanding crusher applications.



**Premium features for added reliability**

Crush+ is a rugged IP65 severe-duty motor, built on the trusted SD200 design. Choose from 440-580 frame sizes with Class H insulation for maximum reliability. Opt for SP4 (NEMA Super Premium® efficiency) for enhanced performance.



**Most versatile cast iron motor – ready for retrofitting**

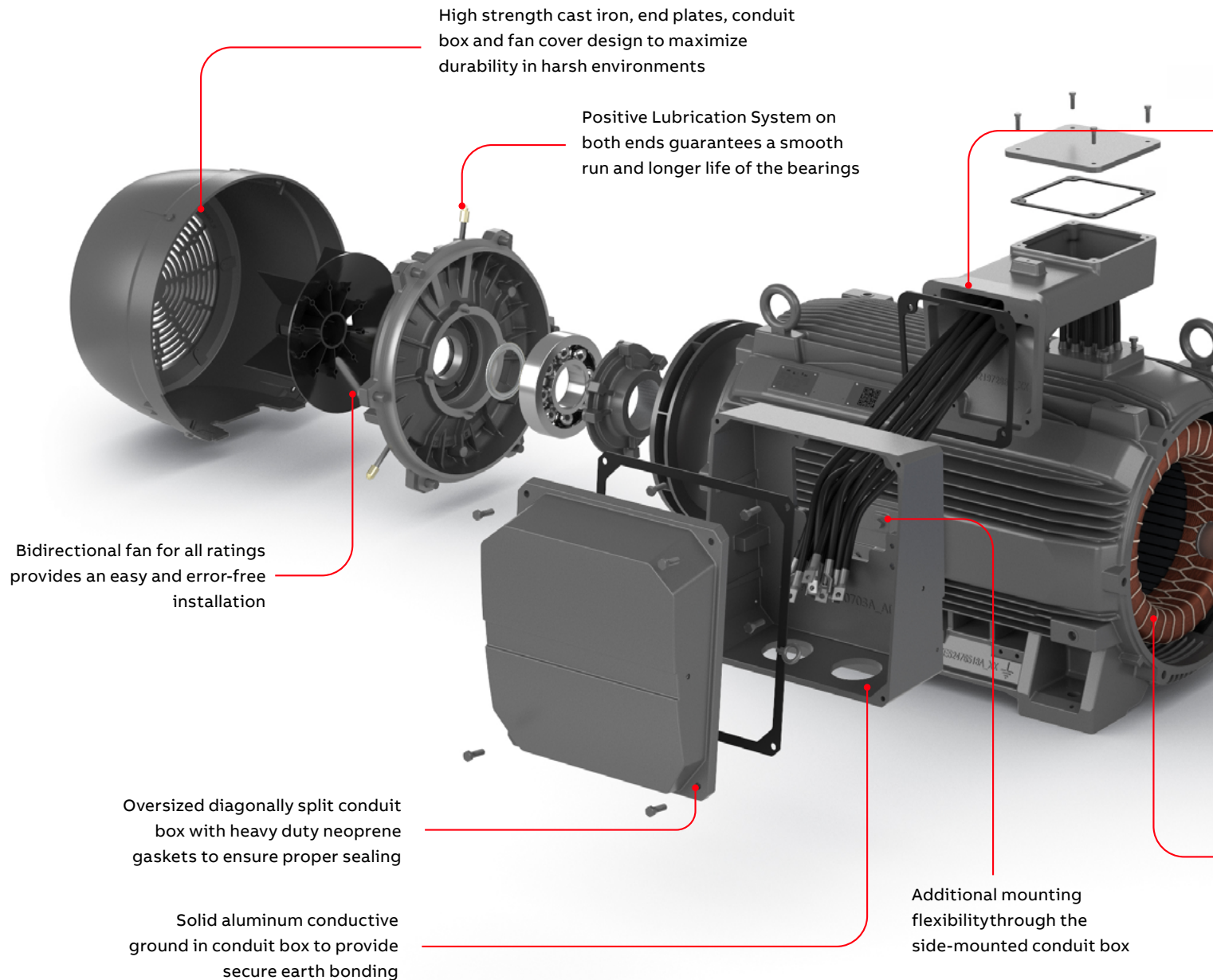
Designed for easy field retrofitting: enjoy the convenience of a customizable F1/F2/F3 conduit box, along with a plethora of auxiliary box options. Whether it's adapting to existing setups or accommodating specific requirements, Crush+ is catered to your unique needs.

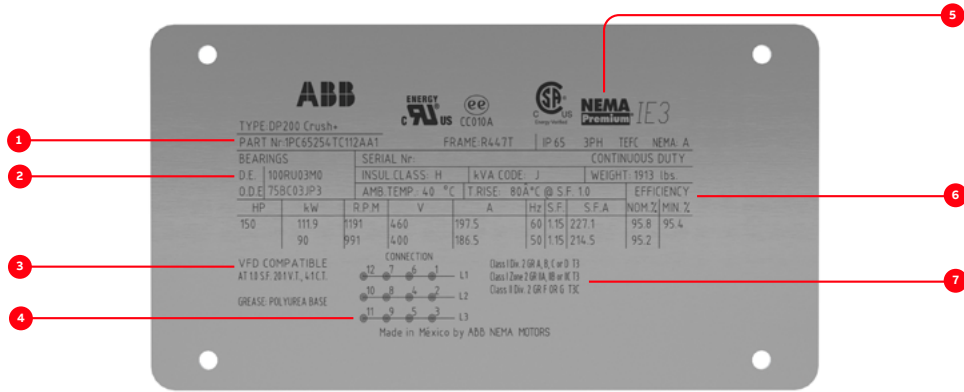


# ABB NEMA Motors

## DP200 Crush+

The ABB NEMA Motors DP200 Crush+ is designed for use in hard-starting applications, such as crushers and conveyors in challenging environments. It incorporates the superior features of the SD200, customized specifically for crusher and other hard-start application use.





- 1. Part number
- 2. Bearing information
- 3. VSD/Grease information
- 4. Wiring diagram
- 5. Compliance logo
- 6. Electrical characteristics
- 7. Area classification/Temp Code

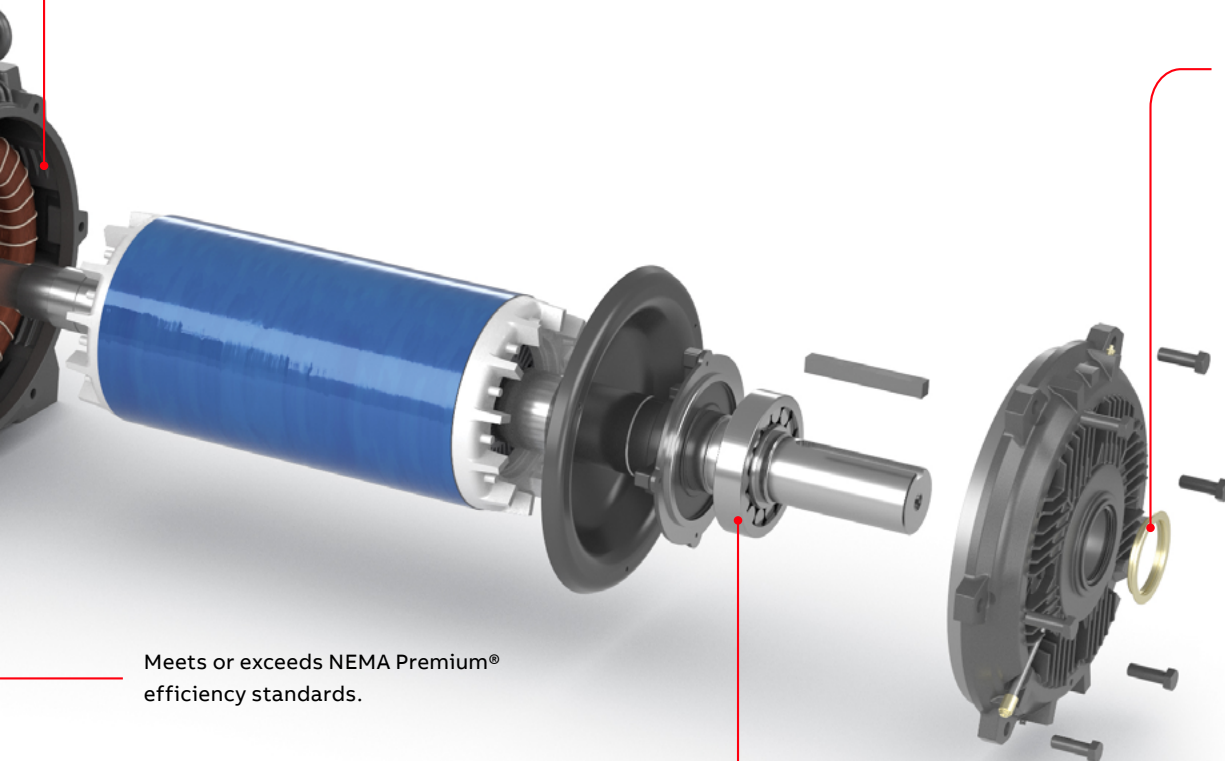
Easy to change F1/F2/F3 conduit box design for ease of retrofitting and installation

Full Class H-Inverter Duty insulation protects against winding stress






Bearing isolators used on both ends of the motor for added protection

Meets or exceeds NEMA Premium® efficiency standards.

Oversized roller bearings on to ensure better motor performance



# Features that improve overall performance

Customer benefit	ABB offering	Featured that matter
	<b>Reliability</b>  Fit-for-purpose motor that is designed for the application	High breakdown and breakdown torque that is intended for crushing applications Heavy-duty robust cast-iron frame for all sizes Roller bearings for heavy belt loads. More contact points than ball bearings mean less wear on the bearings even with heavier shock-loads Class I, Division 2, Group A, B, C & D Class II, Division 2, Group F & G Non-contact Labyrinth DE and NDE seals are substantially more reliable than taconite seals. NEMA Premium® efficiency as standard, and NEMA Super Premium available.
	<b>Safety</b>  Safety is our #1 priority with safe installation, connection, and operation making our motors the most reliable in the industry	Lifting provisions UR component CSA (Class I, Division 2; Class II Division 2, NRTL certified for hazardous locations)
	<b>Extended motor life</b>  Performance enhancing features that make ABB the #1 motor brand	Inverter duty Class B temperature rise Class H insulation to withstand higher thermal capacity which extends the life of the motor IP65 ingress protection that has long-lasting bearings and seals C-4140 high strength shaft material for durability NDE and DE bronze labyrinth InPro seals provides better protection than taconite seals
	<b>Ease of maintenance</b>  With maintenance in mind, we've designed the Crush+ motors to be easy to install, connect, and conduct maintenance for extended performance.	PLS is a superior lubrication system that yields lower bearing temperature for longer motor life Field modifiable conduit box (F1/F2/F3) – retrofitting made easy! Oversized conduit box for easier connection Bidirectional fan can run in either direction – increases availability and reduces risks ABB Ability™ ready for remote condition monitoring
	<b>Support</b>  Large inventory and support network	Over 25 stocking locations in the US Supported by the ABB District Offices ABB Ability condition monitoring allows for easy trouble-shooting and optimized motor performance

# DP200 Crush+

## 100 - 600 HP, 460 volts

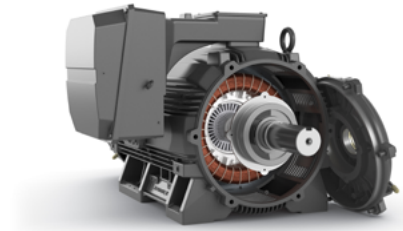


Hp	RPM	NEMA Frame	Catalog Number	S.F.	CT (Hz)	VT (Hz)	Voltage	FL Amps	FL eff%	Torque (Lb-Ft)	LRT	BDT
<b>460 Volts</b>												
100	1200	R444T	<b>1PC65254SC112AA1</b>	1.15	4:1	20:1	460	128	95.0	440	170%	260%
125	1200	R445T	<b>1PC65254SC212AA1</b>	1.15	4:1	20:1	460	158	95.0	552	170%	260%
	1800	R444T	<b>1PC65254SB112AA1</b>	1.15	4:1	20:1	460	164	95.4	367	235%	340%
150	1200	R447T	<b>1PC65254TC112AA1</b>	1.15	4:1	20:1	460	198	95.8	662	200%	300%
	1800	R445T	<b>1PC65254SB212AA1</b>	1.15	4:1	20:1	460	194	95.8	440	240%	340%
200	1200	R449T	<b>1PC65254TC212AA1</b>	1.15	4:1	20:1	460	250	95.8	884	200%	280%
	1800	R447T	<b>1PC65254TB112AA1</b>	1.15	4:1	20:1	460	254	96.2	587	250%	340%
250	1200	R449T	<b>1PC65254TC312AA1</b>	1.15	4:1	20:1	460	310	95.8	1107	200%	300%
		R586	<b>1PC65255TC212AA1</b>	1.15	4:1	20:1	460	293	95.8	1098	250%	330%
	1800	R449T	<b>1PC65254TB212AA1</b>	1.15	2:1	20:1	460	309	96.2	732	250%	340%
300	1200	RL449T	<b>1PC65254UC112AA1</b>	1.15	4:1	20:1	460	386	95.8	1331	200%	300%
		R586	<b>1PC65255TC312AA1</b>	1.15	4:1	20:1	460	356	95.8	1321	250%	320%
	1800	R449T	<b>1PC65254TB312AA1</b>	1.15	2:1	20:1	460	383	96.2	882	250%	260%
		R586	<b>1PC65255TB112AA1</b>	1.15	4:1	20:1	460	356	96.2	879	250%	330%
350	1200	R5010	<b>1PC65255RC212AA1</b>	1.15	4:1	20:1	460	417	96.2	1543	250%	320%
		R587	<b>1PC65255TC412AA1</b>	1.15	4:1	20:1	460	417	96.2	1543	250%	320%
	1800	RL449T	<b>1PC65254UB112AA1</b>	1.15	2:1	20:1	460	422	96.2	1028	250%	280%
		R586	<b>1PC65255TB212AA1</b>	1.15	4:1	20:1	460	418	96.2	1025	250%	330%
400	1200	R5011	<b>1PC65255RC812AA1</b>	1.15	4:1	20:1	460	478	96.2	1763	270%	330%
		R587	<b>1PC65255TC512AA1</b>	1.15	4:1	20:1	460	478	96.2	1763	270%	330%
	1800	RL449T	<b>1PC65254UB212AA1</b>	1.15	2:1	20:1	460	495	96.2	1174	280%	300%
		R586	<b>1PC65255TB312AA1</b>	1.15	4:1	20:1	460	479	96.2	1172	260%	330%
450	1200	R589	<b>1PC65255UC412AA1</b>	1.15	4:1	20:1	460	529	96.2	1985	260%	330%
	1800	5010	<b>1PC65255RB212AA1</b>	1.15	4:1	20:1	460	531	96.5	624	260%	300%
		R587	<b>1PC65255TB512AA1</b>	1.15	4:1	20:1	460	531	96.5	1317	260%	330%
500	1200	R5810	<b>1PC65255UC512AA1</b>	1.15	4:1	20:1	460	590	96.2	2204	280%	350%
	1800	5011	<b>1PC65255RB812AA1</b>	1.15	4:1	20:1	460	578	96.7	643	260%	300%
		R587	<b>1PC65255TB612AA1</b>	1.15	4:1	20:1	460	578	96.7	1470	260%	300%
600	1200	R5811	<b>1PC65255UC612AA1</b>	1.15	2:1	20:1	460	708	96.2	2647	260%	350%
	1800	R588	<b>1PC65255TB712AA1</b>	1.15	4:1	20:1	460	691	96.7	1755	250%	300%

Note: Other custom options available upon request. Also available in 50Hz

# DP200 Crush+

## 100 - 600 Hp, 575 volts



Hp	RPM	NEMA Frame	Catalog Number	S.F.	CT (Hz)	VT (Hz)	Voltage	FL Amps	FL eff%	Torque (Lb-Ft)	LRT	BDT
<b>575 Volts</b>												
100	1200	R444T	1PC65254SC113AA1	1.15	4:1	20:1	575	103	95.0	440	170%	260%
125	1800	R445T	1PC65254SC213AA1	1.15	4:1	20:1	575	127	95.0	552	170%	260%
	1800	R444T	1PC65254SB113AA1	1.15	4:1	20:1	575	132	95.4	367	235%	340%
150	1800	R447T	1PC65254TC113AA1	1.15	4:1	20:1	575	159	95.8	662	200%	300%
	1800	R445T	1PC65254SB213AA1	1.15	4:1	20:1	575	156	95.8	440	240%	340%
200	1800	R449T	1PC65254TC213AA1	1.15	4:1	20:1	575	200	95.8	884	200%	280%
	1800	R447T	1PC65254TB113AA1	1.15	4:1	20:1	575	204	96.2	587	250%	340%
250	1200	R586	1PC65255TC213AA1	1.15	4:1	20:1	575	235	95.8	1098	250%	330%
	1800	R449T	1PC65254TC313AA1	1.15	4:1	20:1	575	248	95.8	1107	200%	300%
		R449T	1PC65254TB213AA1	1.15	2:1	20:1	575	248	96.2	732	250%	340%
300	1200	R586	1PC65255TC313AA1	1.15	4:1	20:1	575	285	95.8	1321	250%	320%
	1800	RL449T	1PC65254UC113AA1	1.15	4:1	20:1	575	309	95.8	1331	200%	300%
		R586	1PC65255TB113AA1	1.15	4:1	20:1	575	285	96.2	879	250%	330%
		R449T	1PC65254TB313AA1	1.15	2:1	20:1	575	307	96.2	882	250%	260%
350	1200	R5010	1PC65255RC213AA1	1.15	4:1	20:1	575	334	96.2	1543	250%	320%
		R587	1PC65255TC413AA1	1.15	4:1	20:1	575	334	96.2	1543	250%	320%
	1800	RL449T	1PC65254UB113AA1	1.15	2:1	20:1	575	338	96.2	1028	250%	280%
		R586	1PC65255TB213AA1	1.15	4:1	20:1	575	335	96.2	1025	250%	330%
400	1200	R5011	1PC65255RC813AA1	1.15	4:1	20:1	575	383	96.2	1763	270%	330%
		R587	1PC65255TC513AA1	1.15	4:1	20:1	575	383	96.2	1763	270%	330%
	1800	RL449T	1PC65254UB213AA1	1.15	2:1	20:1	575	396	96.2	1174	280%	300%
		R586	1PC65255TB313AA1	1.15	4:1	20:1	575	384	96.2	1172	260%	330%
450	1200	R589	1PC65255UC413AA1	1.15	4:1	20:1	575	424	96.2	1985	260%	330%
	1800	5010	1PC65255RB213AA1	1.15	4:1	20:1	575	425	96.5	624	260%	300%
		R587	1PC65255TB513AA1	1.15	4:1	20:1	575	425	96.5	1317	260%	330%
500	1200	R5810	1PC65255UC513AA1	1.15	4:1	20:1	575	472	96.2	2204	280%	350%
	1800	5011	1PC65255RB813AA1	1.15	4:1	20:1	575	463	96.7	643	260%	300%
		R587	1PC65255TB613AA1	1.15	4:1	20:1	575	463	96.7	1470	260%	300%
600	1200	R5811	1PC65255UC613AA1	1.15	2:1	20:1	575	567	96.2	2647	260%	350%
	1800	R588	1PC65255TB713AA1	1.15	4:1	20:1	575	553	96.7	1755	250%	300%

Note: Other custom options available upon request. Also available in 50Hz



# ABB Ability® condition monitoring

## For hazardous locations

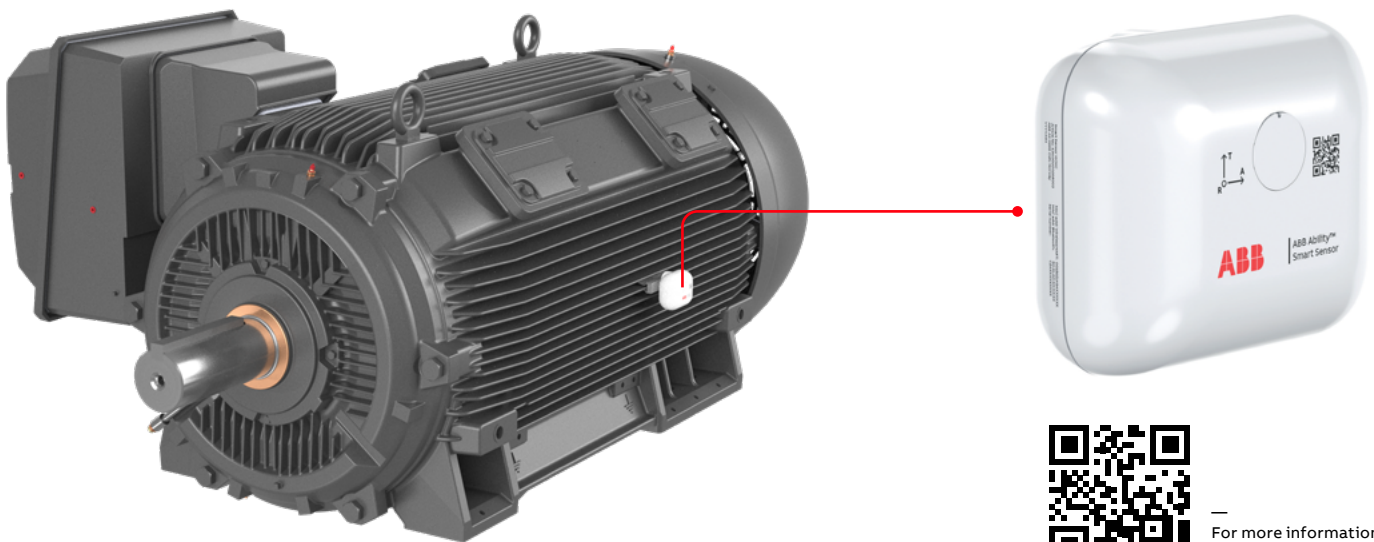
The ABB Ability Smart Sensor for hazardous areas monitors the health and performance of rotating machines operating in explosive atmospheres.

### Sensor features certified for hazardous areas

The ABB Ability Smart Sensor for hazardous areas is designed for harsh environments. Its enclosure withstands high vibration levels and protects the sensor from dust and water ingress and is rated IP66/67. The sensor is certified for ATEX, IECEx, and NEC500, making it compliant with the strictest requirements for equipment operating in explosive atmospheres.

### Health checks

Based on ABB's extensive know-how, advanced algorithms are used to analyze the data and produce meaningful information such as temperature, vibration, load, number of starts and more. The sensor sends this information directly to a smartphone or gateway and to a dedicated ABB Ability Smart Sensor portal. Data is also tracked over time for trend analysis.



For more information on  
ABB Ability smart sensor

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# ABB, your global value partner

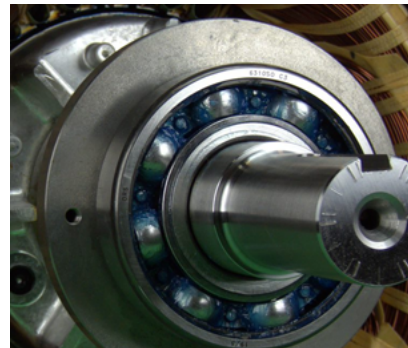
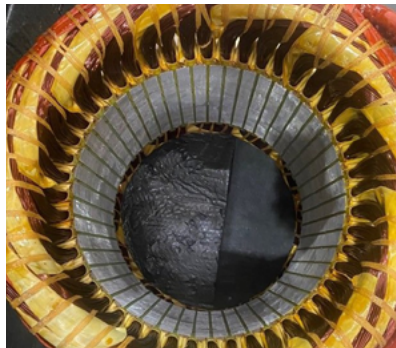
Partnering with ABB gives you access to some of the world's most innovative technology and thinking.

## Global reach

ABB operations in over 100 countries with its own manufacturing, logistics and sales operations together with a wide network of local channel partners that can quickly respond to your needs. They bring our products and services straight to your front door. The ABB channel partners have in-depth knowledge of local markets and are conversant with the defined ABB products and processes.

## Energy efficiency

ABB has what it takes to help every industry and application reach new levels of efficiency and energy savings even under the most demanding conditions. Combining the best available materials with superior technology, our motors are designed to operate reliably no matter how challenging the process or application, and to have life cycle costs.







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