



IEC/EN IA (STRONG)

IEC/EN IIA (MEDIUM)

IEC/EN IIIA (LOW)

ENERCON
PRODUCT PORTFOLIO

TECHNICAL DATA SHEETS (LAST UPDATED 08/2025)

EP5			E-175 EP5 E-160 EP5
EP3		E-138 EP3	



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E-138 EP3 E3

4,260 kW



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TECHNICAL DATA

E-138 EP3 E3

Last updated: 08/2025. Technical information subject to change.

GENERAL

Nominal power	4,260 kW
Yield Optimized Mode	4,500 kW
Wind class (IEC)	IEC S / IEC IIA*
Wind zone (DIBt)	WZ 2 S
Turbine concept	gearless, variable speed, full power converter
Design service life	25 years
Cut in wind speed	2.5 m/s
Cut out wind speed	28 m/s
Extreme wind speed at hub height (3-second gust)	59.5 m/s
Ambient temperature for normal operation	-25 °C to +40 °C
Extreme temperature range	-40** °C to +50 °C
Grid feed / control system	ENERCON inverter
Grid frequency	50 Hz / 60 Hz
Sound power level	106.0 dB(A) [4.260 kW] 106.5 dB(A) [4.500 kW] Yield and noise-optimised operation. Further modes on request.

ROTOR

Rotor diameter	138.25 m
Swept area	15,011 m²
Type	upwind rotor with active pitch control

TOWER

Hub height	IEC IIA	IEC S	IEC IIIA
	81 m	111 m	160 m
	90 m	131 m	
	99 m		

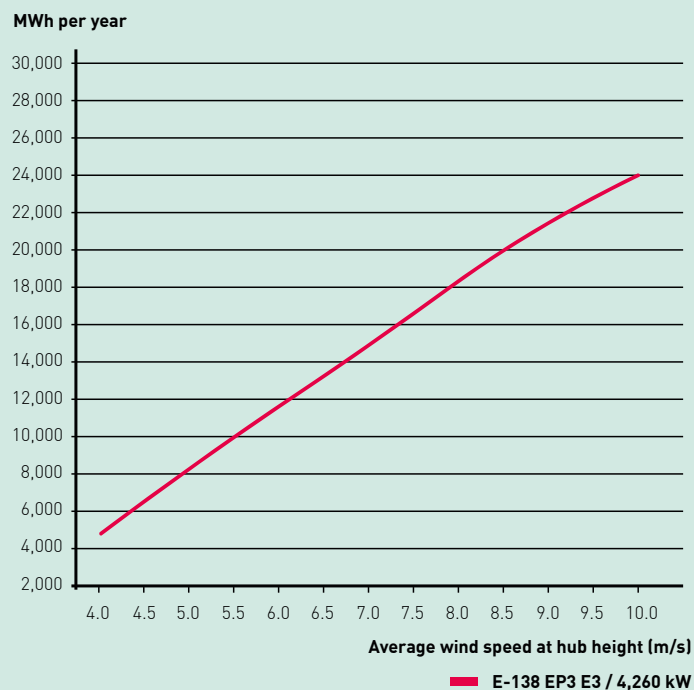
GENERATOR

Type	directly driven, separately excited annular generator
Cooling system	air cooling system

FEATURES

	STANDARD	OPTIONAL
FACTS and transmission	X	
ENERCON SCADA	X	
ENERCON storm control	X	
Ice detection system		X
Blade heating system		X
ENERCON shadow shutdown		X
ENERCON SCADA bat protection		X
Sector management for wind farms		X
Beacon management for wind farms		X

ANNUAL ENERGY YIELD



* dependent on hub height

** with cold climate variant



E-160 EP5 E3

5,560 kW



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TECHNICAL DATA

E-160 EP5 E3

Last updated: 08/2025. Technical information subject to change.

GENERAL

Nominal power	5,560 kW
Wind class (IEC)	IEC S
Wind zone (DIBt)	WZ S GK S
Turbine concept	gearless, variable speed, full power converter
Design service life	20 years (IEC IIIA) 25 years (IEC IIB)
Cut in wind speed	2.5 m/s
Cut out wind speed	28 m/s
Extreme wind speed at hub height (3-second gust)	52.5 m/s
Ambient temperature for normal operation	-10 °C to +40 °C
Extreme temperature range	-20 °C to +50 °C
Grid feed / control system	ENERCON inverter
Grid frequency	50 Hz / 60 Hz
Sound power level	98.0 - 106.8 dB(A)* Yield and noise-optimised operation. Further modes on request.

ROTOR

Rotor diameter	160 m
Type	upwind rotor with active pitch control

TOWER

Hub height	IEC S
	99 m
	120 m
	140 m
	160 m
	166 m

* dependent on hub height

GENERATOR

Type	multi-pole synchronous generator (PMG)
Cooling system	air cooling system

FEATURES

	STANDARD	OPTIONAL
FACTS and transmission	X	
ENERCON SCADA	X	
ENERCON storm control	X	
ENERCON Shadow shutdown		X
ENERCON SCADA bat protection		X
Ice detection system		X
Sector management for wind farms		X
Beacon management for wind farms		X

ANNUAL ENERGY YIELD



— E-160 EP5 E3 / 5,560 kW



E-175 EP5

6,000 kW



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TECHNICAL DATA

E-175 EP5

Last updated: 08/2025. Technical information subject to change.

GENERAL

Nominal power	6,000 kW
Yield Optimized Mode	6,300 kW
Wind class (IEC)	IEC S / IEC IIA*
Wind zone (DIBt)	WZ 2 GK II / WZ 3*
Turbine concept	gearless, variable speed, full power converter
Design service life	25 years (IEC S)
Cut in wind speed	2.0 m/s
Cut out wind speed	25 m/s
Extreme wind speed at hub height (3-second gust)	59.5 m/s
Ambient temperature for normal operation	-20 °C to +40 °C
Extreme temperature range	-30 °C to +40 °C
Grid feed / control system	ENERCON inverter
Grid frequency	50 Hz / 60 Hz
Sound power level	105.5 dB(A) (6,000 kW) 106,5 dB(A) (6,300 kW) Yield and noise-optimised operation. Further modes on request.

ROTOR

Rotor diameter	175 m
Type	upwind rotor with active pitch control

TOWER

Hub height	IEC S	IEC IIA
	112 m	112 m
	132 m	
	162 m	

* dependent on hub height

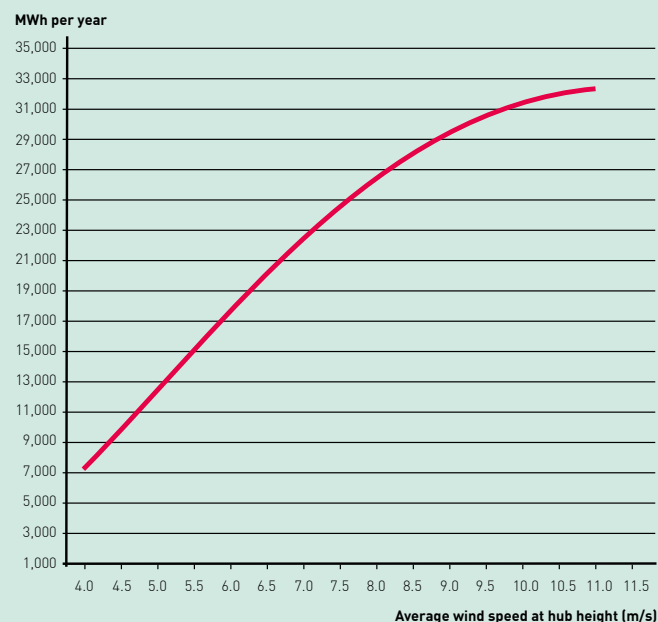
GENERATOR

Type	multi-pole synchronous generator (PMG)
Cooling system	air cooling system

FEATURES

	STANDARD	OPTIONAL
FACTS and transmission	X	
ENERCON SCADA	X	
ENERCON storm control	X	
ENERCON Shadow shutdown		X
ENERCON SCADA bat protection		X
Ice detection system		X
Sector management for wind farms		X
Beacon management for wind farms		X
De-Icing System		X
Yield Optimized Modes		X

ANNUAL ENERGY YIELD



— E-175 EP5 / 6,000 kW



E-175 EP5 E2

7,000 kW



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ENERGY FOR THE WORLD

TECHNICAL DATA

E-175 EP5 E2

Last updated: 08/2025. Technical information subject to change.

GENERAL

Nominal power	7,000 kW
Wind class (IEC)	IEC S / IEC IIA*
Wind zone (DIBt)	WZ S / WZ 2*
Turbine concept	gearless, variable speed, full power converter
Design service life	25 years
Cut in wind speed	2.5 m/s
Cut out wind speed	25 m/s
Extreme wind speed at hub height (3-second gust)	up to 59.50 m/s*
Ambient temperature for normal operation	-20 °C to +40 °C
Extreme temperature range	-30 °C to +40 °C
Grid feed / control system	ENERCON inverter
Grid frequency	50 Hz / 60 Hz
Sound power level	106.9 dB(A)* Noise-optimised operation. Further modes on request.

ROTOR

Rotor diameter	175 m
Type	upwind rotor with active pitch control

TOWER

Hub height	IEC S	IEC IIA
	132 m	112 m
	162 m	
	175 m	

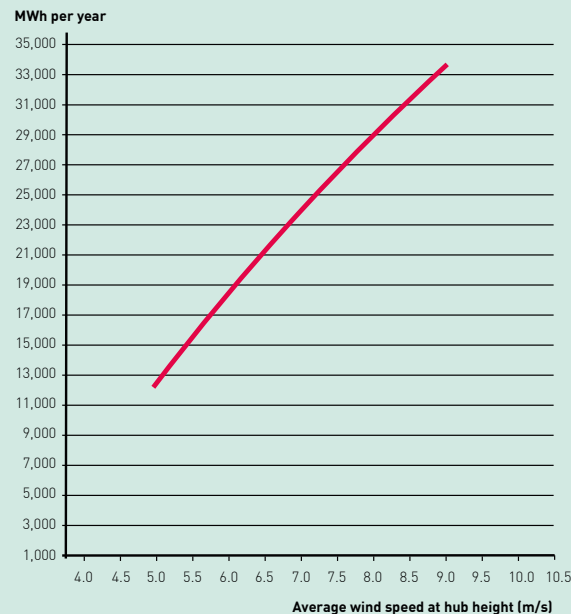
GENERATOR

Type	directly driven ,multi-pole syn- chronous generator (PMG)
Cooling system	air cooling system

FEATURES

	STANDARD	OPTIONAL
FACTS and transmission	X	
ENERCON SCADA	X	
ENERCON storm control	X	
ENERCON Shadow shutdown		X
ENERCON SCADA bat protection		X
Ice detection system		X
Sector management for wind farms		X
Beacon management for wind farms		X
De-Icing System		X

ANNUAL ENERGY YIELD



— E-175 EP5 E2 / 7,000 kW

* dependent on hub height