

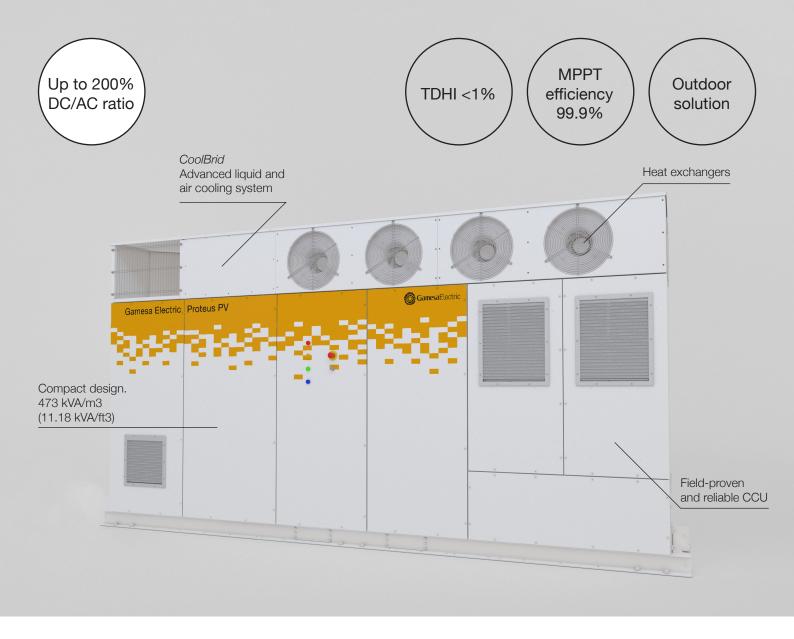
## Gamesa Electric Proteus PV Inverters

Maximum energy and versatility for utility-scale projects









### Gamesa Electric Proteus PV Inverters



Better LCoE

Largest single inverter power block in the market with 4,700 KVA

Fewer inverters per project thus lower Capex and Opex

DC/AC ratio of up to 200%



Higher yield

Market-leading efficiency with 99.45%

THDi < 1% which reduces losses

Enhanced temperature derating: keeping full power up to 40°C [104°F]



Built to last

Designed and manufactured for a 30 year life span

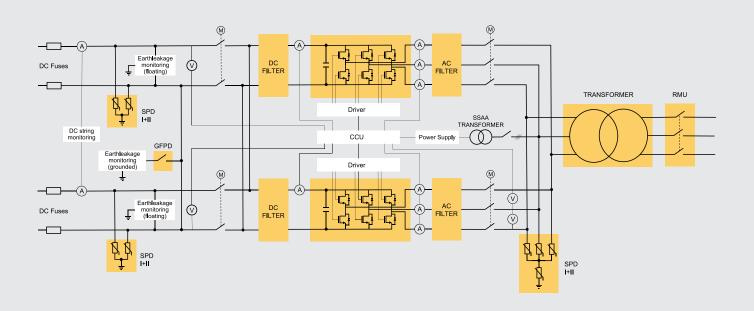
CoolBrid: Smart hybrid cooling system that allows critical components to work far below the temperature limit

Lowest THDi in the market helps to extend power transformers lifespan



The Gamesa Electric Proteus PV Inverters combine high power with maximum versatility for PV plants LCoE reduction.

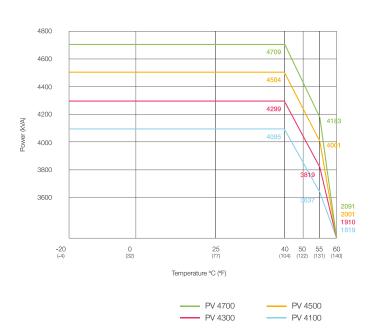
Different product configurations available to optimize performance in demanding environments as well as different voltage levels to fit customers' needs.



#### **Efficiency**

# 99% 98% 97% 96% 0 10 20 30 40 50 60 70 80 90 100 Power (%) 1300 Vdc 1220 Vdc 950 Vdc 915 Vdc 1175 Vdc

### Configurations Up to 4700 kVA

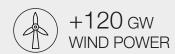


		Gamesa Electric			
		Gamesa Electric Proteus PV 4100	Gamesa Electric Proteus PV 4300	Gamesa Electric Proteus PV 4500	Gamesa Electric  Proteus PV 4700
OC Input					
OC Voltage Range(1)		835 - 1500 V	875 - 1500 V	915 - 1500 V	955 - 1500 V
OC Voltage Range MPPT(1)		835 - 1300 V	875 - 1300 V	915 - 1300 V	955 - 1300 V
lumber of Power Modules	8	2, not galvanically isolated, 1 M	IPPT		
Max. DC Current @40°C [1	04°F]	2 x 2500 A			
Max. DC Current @50°C [1	22°F]	2 x 2313 A			
Max. DC Current @55°C [1	31°Fl	2 x 2220 A			
Max. DC Current @60°C [1		2 x 1110 A			
Maximum Short-circuit Cu		Up to 9000 A			
	Henr, I <sub>sc</sub> F V	<del> </del>			
Ir of DC Ports <sup>(1)</sup>		max 24 fuse +/- monitored			
		max 36 fuse + monitored			
use Dimensions		125 A to 500 A			
Max. Wire Cross Section p	per DC Input	2 x 400 mm² - 800 AWG			
Energy Production from		0.5% Pn approx.			
C Output					
lumber of phases		Three-phase			
Iominal AC Power Total @	940°C [104°F]	4095 kVA	4299 kVA	4504 kVA	4709 kVA
ominal AC Power Total @	250°C [122°F]	3790 kVA	3979 kVA	4169 kVA	4358 kVA
ominal AC Power Total @	955°C [131°F]	3637 kVA	3819 kVA	4001 kVA	4183 kVA
ominal AC Power Total @		1819 kVA	1910 kVA	2001 kVA	2091 kVA
laximum AC Current @40		3940 Arms			
	ا بران ا		630 Vrms	660 Vrms	600 1/200
ominal AC Voltage(1)	D (I)	600 Vrms	630 Vrms	660 Vrms	690 Vrms
Iominal Voltage Allowance	e Hange <sup>(1)</sup>	+/-10%			
requency Range(1)		47.5 - 53/57 - 63 Hz			
HD of AC Current		< 1% @Sn			
ower Factor Range		0 (reactive) - 1 - 0 (capacitive)			
Maximum Wire Cross Sect	tion per AC Output Phase	6 x 400 mm <sup>2</sup>			
Performance					
Max. Efficiency		99.45%			
		99 24%			
Euro Efficiency		99.24%	00.070/	00.110/	00.140/
uro Efficiency EC Efficiency stand-by Power Consump seneral Data		99.24% 99.02% < 200 W -20°C / +60°C [-4°F / +140°F]	99.07%	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(3)</sup>		99.02% < 200 W -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deration		99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude(S) Cooling System		99.02% < 200 W -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratii Liquid & forced air	ng)	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(S)</sup> Cooling System Relative Humidity		99.02% < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratii Liquid & forced air 4% – 100% (w/o condensation)	ng)	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(S)</sup> Cooling System Relative Humidity		99.02% < 200 W -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratii Liquid & forced air	ng)	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(3)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup>		99.02% < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratii Liquid & forced air 4% – 100% (w/o condensation)	ng)	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(3)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup>		99.02% < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratii Liquid & forced air 4% – 100% (w/o condensation) Zone 4 IBC 2012	ng)	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(3)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Snow load <sup>(1)</sup>		99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2	ng)	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude <sup>(3)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Snow load <sup>(1)</sup> Protection Class		99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R	ng)	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude <sup>(3)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Snow load <sup>(1)</sup> Protection Class Dimensions (W/H/D)		99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2	ng)	99.11%	99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Frotection Class Dimensions (W/H/D) Veight		99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	ng)		99.14%
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight		99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	.3" x 88.5" x 40.2"]	Other Protections	
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Open Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Side Disconnection & S	ration <sup>(2)</sup> Short-circuit Current Protection	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	ng)	Other Protections Over-temperature Protection	
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Open Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection	ration <sup>(2)</sup> Short-circuit Current Protection	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deraticle Liquid & forced air  4% – 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/mg  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breaked  Type 1 + 2 SPD	.3" x 88.5" x 40.2"]	Other Protections	
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Open Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Veight AC Protections AC Overvoltage Protection Anti-islanding	ration <sup>(2)</sup> Short-circuit Current Protection	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deration)  Liquid & forced air  4% – 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake  Type 1 + 2 SPD  Included (SW)	.3" x 88.5" x 40.2"]	Other Protections Over-temperature Protection	
iuro Efficiency EEC Efficiency stand-by Power Consump seneral Data emperature Range - Oper Maximum Altitude <sup>(5)</sup> cooling System stelative Humidity seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> erotection Class primensions (W/H/D) Veight  IC Protections IC Side Disconnection & S IC Overvoltage Protection inti-islanding arid Voltage Fluctuations (	ration <sup>(2)</sup> Short-circuit Current Protection	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deration)  Liquid & forced air  4% - 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breaked  Type 1 + 2 SPD  Included (SW)  Included (SW)	.3" x 88.5" x 40.2"]	Other Protections Over-temperature Protection	
uro Efficiency EEC Efficiency Itand-by Power Consump Itand-by Power	ration <sup>(2)</sup> Short-circuit Current Protection	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deration)  Liquid & forced air  4% – 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake  Type 1 + 2 SPD  Included (SW)	.3" x 88.5" x 40.2"]	Other Protections Over-temperature Protection	
Euro Efficiency EEC Efficiency Stand-by Power Consump General Data Gemperature Range - Oper Maximum Altitude(G) Cooling System Relative Humidity Geismic(T) Max. wind speed(T) Protection Class Dimensions (W/H/D) Veight MC Protections MC Side Disconnection & S MC Overvoltage Protection unti-islanding Grid Voltage Fluctuations (Frequency Failure	ration <sup>(2)</sup> Short-circuit Current Protection	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deration)  Liquid & forced air  4% - 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breaked  Type 1 + 2 SPD  Included (SW)  Included (SW)	.3" x 88.5" x 40.2"]	Other Protections Over-temperature Protection Emergency Push Button	
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude(3) Cooling System Relative Humidity Seismic(1) Max. wind speed(1) Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Trequency Failure DC Protections	ration <sup>(2)</sup> Short-circuit Current Protection	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	ng) .3" x 88.5" x 40.2"] ers - one per each power module	Other Protections Over-temperature Protection Emergency Push Button Optional	1
Euro Efficiency CEC Efficiency Stand-by Power Consump General Data Gemperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Geismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations (Frequency Failure  DC Protections DC Disconnection DC Protections DC Disconnection	ration <sup>(2)</sup> Short-circuit Current Protection (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	.3" x 88.5" x 40.2"]	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	∩ 30°C [-22°F]
Euro Efficiency EEC Efficiency Stand-by Power Consump General Data Gemperature Range - Oper Maximum Altitude(G) Cooling System Relative Humidity Geismic(T) Max. wind speed(T) Grove Cooling System Order Cooling System Relative Humidity Geismic(T) Max. wind speed(T) Grove Load Order Cooling System Order	ration <sup>(2)</sup> Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	ng) .3" x 88.5" x 40.2"] ers - one per each power module	Other Protections Over-temperature Protection Emergency Push Button Optional	∩ 30°C [-22°F]
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude(3) Cooling System Relative Humidity Seismic(1) Max. wind speed(1) Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Trequency Failure  DC Protections DC Obsconnection DC Short-circuit Protection DC Over-voltage Protection DC Short-circuit Protection DC Over-voltage Protection DC Over-voltage Protection DC Short-circuit Protection DC Over-voltage Protection	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	ng) .3" x 88.5" x 40.2"] ers - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	∩ 30°C [-22°F]
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude(3) Cooling System Relative Humidity Seismic(1) Max. wind speed(1) Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Trequency Failure  DC Protections DC Obsconnection DC Short-circuit Protection DC Over-voltage Protection DC Short-circuit Protection DC Over-voltage Protection DC Over-voltage Protection DC Short-circuit Protection DC Over-voltage Protection	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	ng) .3" x 88.5" x 40.2"] ers - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	∩ 30°C [-22°F]
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Frequency Failure DC Protections DC Short-circuit Protection DC Over-voltage Protection DC Short-circuit Protection DC Over-voltage Protection Reverse Polarity Detection	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o derating the content of	ng) .3" x 88.5" x 40.2"] ers - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	∩ 30°C [-22°F]
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude(S) Cooling System Relative Humidity Seismic(1) Max. wind speed(1) Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations (Crequency Failure DC Protections DC Short-circuit Protection DC Over-voltage Protection DC Ground Fault and Insul	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	ng) .3" x 88.5" x 40.2"] ers - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	∩ 30°C [-22°F]
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Frequency Failure DC Protections DC Short-circuit Protection DC Over-voltage Protection CC Over-voltage Protection DC Short-circuit Protection DC Over-voltage Protection DC Ground Fault and Insul	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o derating the content of the content o	ang)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	∩ 30°C [-22°F]
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Frequency Failure DC Protections DC Short-circuit Protection DC Over-voltage Protection DC Over-voltage Protection DC Ground Fault and Insul Communications	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F]  < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation)  Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake Type 1 + 2 SPD  Included (SW)  Included (SW)  Two motorized DC switches (on-led DC fuses  Type 1 + 2 SPD  Included Included  Included	ang)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	∩ 30°C [-22°F]
Euro Efficiency DEC Efficiency Stand-by Power Consump General Data Temperature Range - Oper Maximum Altitude <sup>(3)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Gide Disconnection & S AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Frequency Failure DC Protections DC Short-circuit Protection DC Short-circuit Protection DC Ground Fault and Insul Communications Communications Communications Communications Control <sup>(1)</sup> Monitoring <sup>(1)</sup>	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% - 100% (w/o condensation) Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake Type 1 + 2 SPD Included (SW) Included (SW) Included (SW)  Two motorized DC switches (on-led DC fuses Type 1 + 2 SPD Included Included Included Included Included	ang)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	∩ 30°C [-22°F]
Euro Efficiency Stand-by Power Consump Seneral Data Semeral Data Semeral Data Semperature Range - Oper Maximum Altitude(S) Cooling System Relative Humidity Seismic(T) Max. wind speed(T) Show load(T) Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Serid Voltage Fluctuations (Serequency Failure DC Protections DC Obsconnection DC Short-circuit Protection DC Ground Fault and Insul Communications Communicat	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation) Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake Type 1 + 2 SPD Included (SW) Included (SW) Included (SW)  Two motorized DC switches (online) DC fuses Type 1 + 2 SPD Included Included Included Included Included	ang)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to Enhanced corrosion protect	30°C [-22°F]
Euro Efficiency Stand-by Power Consump Stand-by Stand	Short-circuit Current Protection  (LVRT, HVRT)(1)	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation) Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake Type 1 + 2 SPD Included (SW) Included (SW) Included (SW) Included (SW)  Two motorized DC switches (on-led) DC fuses Type 1 + 2 SPD Included Included Included Included Included Included	ang)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to	n 30°C [-22°F] ion
Euro Efficiency Stand-by Power Consump Seneral Data Semeral Data Semeral Data Semeral Data Semperature Range - Oper Maximum Altitude(S) Cooling System Relative Humidity Seismic(T) Max. wind speed(T) Show load(T) Protection Class Dimensions (W/H/D) Weight AC Protections AC Overvoltage Protection Anti-islanding Serid Voltage Fluctuations (Serequency Failure DC Protections DC Disconnection DC Short-circuit Protection DC Ground Fault and Insulations DC Ground Fault and Insulations Communications Communications Communications Communications Communications Control(T) Webserver Standards/Directives(4) EC 62109-1	Short-circuit Current Protection  CLVRT, HVRT)(1)  In I	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation) Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake Type 1 + 2 SPD Included (SW) Included (SW) Included (SW) Included (SW)  Two motorized DC switches (on-led) DC fuses Type 1 + 2 SPD Included	ng)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module  request)	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to - Enhanced corrosion protect	n 30°C [-22°F] ion
Euro Efficiency CEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Geismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Gide Disconnection & S AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Frequency Failure  DC Protections DC Obsconnection DC Short-circuit Protection DC Ground Fault and Insuit Communications Communications Control <sup>(1)</sup> Webserver  Standards/Directives <sup>(4)</sup> EC 62109-1 EC 62109-2	Short-circuit Current Protection  CLVRT, HVRT)(1)  In I	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation) Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake Type 1 + 2 SPD Included (SW) Included (SW) Included (SW) Included (SW)  Two motorized DC switches (on-led) DC fuses Type 1 + 2 SPD Included	ng)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module  request)  NEC 2020 CEA 2007	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to - Enhanced corrosion protect  (1) Consult Gamesa Electric for a sign) (2) With derating from 40°C [104°F	n 30°C [-22°F] ion specific configuration perating as optional
Euro Efficiency CEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Gide Disconnection & S AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Frequency Failure  DC Protections DC Disconnection DC Short-circuit Protection DC Ground Fault and Insuit Communications Communications Communications Communications Control <sup>(1)</sup> Webserver  Standards/Directives <sup>(4)</sup> EC 62109-1 EC 62109-2 EC 61000-6-2/4	Short-circuit Current Protection  CLVRT, HVRT)(1)  In I	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation) Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake Type 1 + 2 SPD Included (SW) Included (SW) Included (SW) Included (SW)  Two motorized DC switches (on-led) DC fuses Type 1 + 2 SPD Included	ng)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module  request)  NEC 2020 CEA 2007 Rule 14, Rule 21	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to - Enhanced corrosion protect  (1) Consult Gamesa Electric for a significant substitution of the consult of the c	n 30°C [-22°F] ion specific configuration perating as optional
Euro Efficiency CEC Efficiency Stand-by Power Consump General Data Femperature Range - Oper Maximum Altitude <sup>(5)</sup> Cooling System Relative Humidity Seismic <sup>(1)</sup> Max. wind speed <sup>(1)</sup> Protection Class Dimensions (W/H/D) Weight AC Protections AC Gide Disconnection & S AC Overvoltage Protection Anti-islanding Grid Voltage Fluctuations ( Frequency Failure  DC Protections DC Disconnection DC Short-circuit Protection DC Ground Fault and Insuit Communications Communications Communications Communications Communications Control <sup>(1)</sup> Webserver  Standards/Directives <sup>(4)</sup> EC 62109-1 EC 62109-2	Short-circuit Current Protection  CLVRT, HVRT)(1)  In I	99.02%  < 200 W  -20°C / +60°C [-4°F / +140°F] < 2,000 m [6,561 ft] (w/o deratic Liquid & forced air  4% – 100% (w/o condensation) Zone 4 IBC 2012  288 km/h (179 mph)  2.5 kN/m2  IP55 class 1, NEMA3R  4,325 x 2,250 x 1,022 mm [170  4,535 kg [10,000 lb]  Two motorized AC circuit breake Type 1 + 2 SPD Included (SW) Included (SW) Included (SW) Included (SW)  Two motorized DC switches (on-led) DC fuses Type 1 + 2 SPD Included	ng)  3" x 88.5" x 40.2"]  ers - one per each power module  pad) - one per each power module  request)  NEC 2020 CEA 2007	Other Protections Over-temperature Protection Emergency Push Button  Optional Low Temperature Kit up to - Enhanced corrosion protect  (1) Consult Gamesa Electric for a significant substitution of the consult of the c	n 30°C [-22°F] ion specific configuration perating as optional



### Shaping New Energy









Worldwide presence: commercial offices and manufacturing facilities

Argentina Australia Austria Belgium Brazil Canada Chile China Croatia Denmark Egypt Finland France Germany Greece Hong Kong Hungary India Ireland Italy Japan Korea Mexico Morocco Netherlands Norway Philippines Poland Singapore South Africa Sri Lanka Sweden Taiwan Thailand Turkey UK USA Vietnam



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