



SHIFTING THE LIMITS

FRONIUS IG PLUS ADVANCED WITH INTEGRATED AFCI



/ MIX Technology



/ Smart Transformer Switching



/ Arc Fault Circuit Interruption



/ Quick Service Technology



/ Smart Grid Ready



/ Wi-Fi* Interface

/ The Fronius IG Plus Advanced was the first complete inverter lineup of NEC 2011 compliant, AFCI protected, inverters in the United States and continues to be the leader in quality inverter technology. Power classes ranging from 3 to 12 kW in both single and true 3 phase applications with integrated Fronius MIX Technology and wide voltage windows are the perfect match for your system design.

TECHNICAL DATA: FRONIUS IG PLUS ADVANCED

| INPUT DATA | 3.0-1 _{UNI} | 3.8-1 _{UNI} | 5.0-1 _{UNI} | 6.0-1 _{UNI} | 7.5-1 _{UNI} | 10.0-1 _{UNI} | 10.0-3 _{DELTA} | 11.4-1 _{UNI} | 11.4-3 _{DELTA} | 12.0-3 _{WYE277} |
|------------------------------------|--|----------------------|----------------------|----------------------|----------------------|-----------------------|-------------------------|-----------------------|-------------------------|--------------------------|
| Recommended PV-Power (kWp) | 2.50 - 3.45 | 3.20 - 4.40 | 4.25 - 5.75 | 5.10 - 6.90 | 6.35 - 8.60 | 8.50 - 11.50 | 8.50 - 11.50 | 9.70 - 13.10 | 9.70 - 13.10 | 10.20 - 13.80 |
| Nominal Input Current | 8.3 A | 10.5 A | 13.8 A | 16.5 A | 20.7 A | 27.6 A | 27.6 A | 31.4 A | 31.4 A | 33.1 A |
| Max. Usable Input Current | 14.0 A | 17.8 A | 23.4 A | 28.1 A | 35.1 A | 46.7 A | 46.7 A | 53.3 A | 53.3 A | 56.1 A |
| MPPT - Voltage Range | 230 - 500 V | | | | | | | | | |
| DC Startup | 260 V | | | | | | | | | |
| Max. Input Voltage | 600 V | | | | | | | | | |
| Admissible Conductor Size (DC) | No. 14 to 6 AWG. For larger wire, use Fronius connecting distributor. | | | | | | | | | |
| Max. Current per DC Input Terminal | 20 Amps. For higher input current, use Fronius connecting distributor. | | | | | | | | | |

| OUTPUT DATA | 3.0-1 _{UNI} | 3.8-1 _{UNI} | 5.0-1 _{UNI} | 6.0-1 _{UNI} | 7.5-1 _{UNI} | 10.0-1 _{UNI} | 10.0-3 _{DELTA} | 11.4-1 _{UNI} | 11.4-3 _{DELTA} | 12.0-3 _{WYE277} | |
|--|----------------------|---------------------------|----------------------|----------------------|----------------------|-----------------------|-------------------------|-----------------------|-------------------------|--------------------------|---------|
| Nominal Output Power | 3,000 W | 3,800 W | 5,000 W | 6,000 W | 7,500 W | 9,995 W | 9,995 W | 11,400 W | 11,400 W | 12,000 W | |
| Max. Continuous Output Power | 3,000 W | 3,800 W | 5,000 W | 6,000 W | 7,500 W | 9,995 W | 9,995 W | 11,400 W | 11,400 W | 12,000 W | |
| AC Output Voltage | 208/240/277 | | | | | | 208/240 | 208/240/277 | 208/240 | 480/277 WYE | |
| Number of Phases | 1 | | | | | | 3 | 1 | 3 | | |
| Admissible Conductor Size (AC) | No. 14 - 4 AWG | | | | | | | | | | |
| Max. Continuous Utility Backfeed Current | 0A | | | | | | | | | | |
| Nominal Output Frequency | 60 Hz | | | | | | | | | | |
| Operating Frequency Range | 59.3 - 60.5 Hz | | | | | | | | | | |
| Total Harmonic Distortion | < 3 % | | | | | | | | | | |
| Power Factor | 0.85 - 1 ind. / cap. | | | | | | | | | | |
| Operating AC Voltage Range | 208 V | 183 - 229 V (-12 / +10 %) | | | | | | | | | |
| | 240 V | 183 - 229 V (-12 / +10 %) | | | | | | | | | |
| | 277 V | 244 - 305 V (-12 / +10%) | | | | | | | | | |
| Max. Continuous Output Current | 208 V | 14.4 A | 18.3 A | 24.0 A | 28.8 A | 36.1 A | 48.1 A | 27.7 A* | 54.8 A | 31.6 A* | n.a. |
| | 240 V | 12.5 A | 15.8 A | 20.8 A | 25.0 A | 31.3 A | 41.7 A | 24.0 A* | 47.5 A | 27.4 A* | n.a. |
| | 277 V | 10.8 A | 13.7 A | 18.1 A | 21.7 A | 27.1 A | 36.1 A | n.a. | 41.2 A | n.a. | 14.4 A* |

*Pre phase

*The term Wi-Fi® is a registered trademark of the Wi-Fi Alliance.

TECHNICAL DATA: FRONIUS IG PLUS ADVANCED

| GENERAL DATA | 3.0-1 _{UNI} | 3.8-1 _{UNI} | 5.0-1 _{UNI} | 6.0-1 _{UNI} | 7.5-1 _{UNI} | 10.0-1 _{UNI} | 10.0-3 _{DELTA} | 11.4-1 _{UNI} | 11.4-3 _{DELTA} | 12.0-3 _{WYE277} | |
|--|--|----------------------|-----------------------|----------------------|----------------------|-----------------------|-------------------------|-----------------------|-------------------------|--------------------------|------|
| Max. Efficiency | 96.2% | | | | | | | | | | |
| Unit Dimensions (W x H x D) | 17.1 x 24.8 x 9.6 in. | | 17.1 x 36.4 x 9.6 in. | | | | 17.1 x 48.1 x 9.6 in. | | | | |
| CEC Efficiency | 208 V | 95.0 % | 95.0 % | 95.5 % | 95.5 % | 95.0 % | 95.0 % | 95.5 % | 95.5 % | 95.0 % | n.a. |
| | 240 V | 95.5 % | 95.5 % | 95.5 % | 96.0 % | 95.5 % | 95.5 % | 95.5 % | 96.0 % | 96.0 % | n.a. |
| | 277 V | 95.5 % | 95.5 % | 96.0 % | 96.0 % | 96.0 % | n.a. | 96.0 % | n.a. | 96.0 % | |
| Consumption in Standby (Night) | < 1.5 W | | | | | | | | | | |
| Consumption During Operation | 8 W | | 15 W | | | | 20 W | | | | |
| Cooling | Controlled forced ventilation, variable speed fan | | | | | | | | | | |
| Enclosure Type | NEMA 3R | | | | | | | | | | |
| Power Stack Weight | 31 lbs. (14 kg) | | 57 lbs. (26 kg) | | | | 84 lbs. (38 kg) | | | | |
| Wiring Compartment Weight | 24 lbs. (11 kg) | | | 26 lbs. (12 kg) | | | | | | | |
| Admissible Ambient Operating Temperature | -40° F...+131° F (-40° C...+55° C) | | | | | | | | | | |
| Advanced Grid Features | Active and reactive power control, low voltage ride-through | | | | | | | | | | |
| Compliance | UL 1741-2010, IEEE 1547-2003, IEEE 1547.1, UL 1699B-2013, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC Article 690, C22. 2 No. 107.1-01 (Sept. 2011) California Solar Initiative - Program Handbook - Appendix C: Inverter Integral 5% Meter Performance Specification | | | | | | | | | | |

| PROTECTIVE EQUIPMENT | 3.0-1 _{UNI} | 3.8-1 _{UNI} | 5.0-1 _{UNI} | 6.0-1 _{UNI} | 7.5-1 _{UNI} | 10.0-1 _{UNI} | 10.0-3 _{DELTA} | 11.4-1 _{UNI} | 11.4-3 _{DELTA} | 12.0-3 _{WYE277} |
|--------------------------------|---|----------------------|----------------------|----------------------|----------------------|-----------------------|-------------------------|-----------------------|-------------------------|--------------------------|
| Ground Fault Protection | Internal GFDI (Ground Fault Detector/Interrupter) in accordance with UL 1741-2010 and NEC Art. 690 | | | | | | | | | |
| DC Reverse Polarity Protection | Internal Diode | | | | | | | | | |
| Islanding Protection | Internal; in accordance with UL 1741-2010, IEEE 1547-2003 and NEC | | | | | | | | | |
| Over Temperature Protection | Output power derating / active cooling | | | | | | | | | |
| Arc-Fault Circuit Protection | Internal AFCI (Arc-Fault Circuit Interrupter); in accordance with UL 1699 Outline of Investigation for Photovoltaic (PV) DC Arc-Fault Circuit Protection (Issue Number 2, January 14, 2013) | | | | | | | | | |

/ Perfect Welding / Solar Energy / Perfect Charging

WE HAVE THREE DIVISIONS AND ONE PASSION: SHIFTING THE LIMITS OF POSSIBILITY.

/ Whether welding technology, photovoltaics or battery charging technology – our goal is clearly defined: to be the innovation leader. With around 3,000 employees worldwide, we shift the limits of what's possible - our more than 850 active patents are testimony to this. While others progress step by step, we innovate in leaps and bounds. Just as we've always done. The responsible use of our resources forms the basis of our corporate policy.

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