

FI G3P-(15-23)-220

Three Phase Grid-Tied Inverters

Features:

- Max. efficiency 97.8%
- 3 MPPT design, suitable for multi-facing roof
- AFCI protection, proactively reduces fire risk
- Nighttime PID recovery function (optional)
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66

Models:

FI G3P-15-220

FI G3P-20-220

FI G3P-23-220



DATASHEET

Models	FI G3P-15-220	FI G3P-20-220	FI G3P-23-220
Input DC			
Recommended max. PV power	22.5 kW	30 kW	34.5 kW
Max. input voltage		1100 V	
Rated voltage		600 V	
Start-up voltage		180 V	
MPPT voltage range		200 - 1000 V	
Max. input current		32 A / 32 A / 32 A	
Max. short circuit current		40 A / 40 A / 40 A	
MPPT number / Max. input strings number		3 / 6	
Output AC			
Rated output power	15 kW	20 kW	23 kW
Max. apparent output power	16.5 kVA	22 kVA	25 kVA
Max. output power	16.5 kW	22 kW	25 kW
Rated grid voltage		3/PE, 220 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	39.4 A	52.5 A	60.4 A
Max. output current	43.3 A	57.7 A	65 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)		
THDi	< 3%		
Efficiency			
Max. efficiency		97.8%	
EU efficiency		97.3%	
Protection			
DC reverse-polarity protection		Yes	
Short circuit protection		Yes	
Output over current protection		Yes	
Surge protection		DC Type II / AC Type II	
Grid monitoring		Yes	
Anti-islanding protection		Yes	
Temperature protection		Yes	
Strings monitoring		Yes	
I/V Curve scanning		Yes	
Multi peak scan		Yes	
Integrated AFCI 2.0		Optional	
Integrated PID recovery		Optional	
Integrated DC switch		Yes	
General Data			
Dimensions (W × H × D)		647 × 629 × 252 mm	
Weight	38.2 kg		42.1 kg
Topology		Transformerless	
Self-consumption (night)		< 1 W	
Operating ambient temperature range		-25 ~ +60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Noise emission (typical)		≤ 60 dB(A)	
Cooling concept		Intelligent fan-cooling	
Max. operation altitude		4000 m	
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530		
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4		
Features			
DC connection		MC4 connector	
AC connection		OT terminal	
Display		LCD	
Communication		RS485, Optional: Wi-Fi, GPRS	

FI G3P-(25-36)-220

Three Phase Grid-Tied Inverters

Features:

- 4 MPPT, max. efficiency 98.4%
- Nighttime PID recovery function (optional)
- AFCI protection, proactively reduces fire risk
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66, C5 Anti-Corrosion level
- Night SVG function

Models:

FI G3P-25-220

FI G3P-30-220

FI G3P-36-220



DATASHEET

Models	FI G3P-25-220		FI G3P-30-220	FI G3P-36-220
Input DC				
Max. input voltage	1100 V			
Rated voltage	360 V			
Start-up voltage	195 V			
MPPT voltage range	180 - 1000 V			
Max. input current	4 × 32 A			
Max. short circuit current	4 × 40 A			
MPPT number / Max. input strings number	4 / 8			
Output AC				
Rated output power	25 kW	30 kW	36 kW	
Max. apparent output power	27.5 kVA	33 kVA	36 kVA	
Max. output power	27.5 kW	33 kW	36 kW	
Rated grid voltage	3/(N)/PE, 220 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	65.6 A	78.7 A	94.5 A	
Max. output current	72.2 A	86.6 A	94.5 A	
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Efficiency				
Max. efficiency	98.4%			
EU efficiency	98.0%			
Protection				
DC reverse-polarity protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Surge protection	DC Type II / AC Type II			
Grid monitoring	Yes			
Anti-islanding protection	Yes			
Temperature protection	Yes			
Strings monitoring	Yes			
I/V Curve scanning	Yes			
Multi peak scan	Yes			
Integrated AFCI 2.0	Optional			
Integrated PID recovery	Optional ⁽¹⁾			
Integrated DC switch	Yes			
General Data				
Dimensions (W × H × D)	691 × 578 × 338 mm			
Weight	53.7 kg			
Topology	Transformerless			
Self-consumption (night)	< 1 W			
Operating ambient temperature range	-25 ~ +60°C			
Relative humidity	0 - 100%			
Ingress protection	IP66			
Noise emission (typical)	< 55 dB(A)			
Cooling concept	Intelligent fan-cooling			
Max. operation altitude	4000 m			
Grid connection standard	UL 1741, IEEE 1547, NBR 16149, NBR 16150, C10-11, REN 342			
Safety / EMC standard	IEC 62109-1/-2, IEC62116 & IEC 61000-6-1/-2/-3/-4			
Features				
DC connection	MC4 connector			
AC connection	OT terminal (max. 70 mm²)			
Display	LCD			
Communication	RS485, USB, Optional: Wi-Fi, GPRS			

(1) Due to the similar functional logic, when the night time PID-Recovery function is integrated, the night time var compensation function can not be used. Also, the negative grounding option is not available for inverters with night time PID-Recovery function.

FI G3P-(50-60)-220

Three Phase Grid-Tied Inverters

Efficient

- 6/8 MPPTs, max. efficiency 98.5%
- > 170% DC/AC ratio
- High power tracking density 130MPPT/MW
- String current up to 16A, perfectly match large current bifacial modules

Smart

- Night SVG function
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

Safe

- IP66
- AFCI protection, proactively reduces fire risk
- Nighttime PID recovery function (optional)
- Overvoltage load reduction and leakage current suppression technology, low failure rate

Economic

- Power line communication (PLC) (optional)
- DC side supports "Y" connector

Models:

FI G3P-50-220

FI G3P-60-220



DATASHEET

Models	FI G3P-50-220	FI G3P-60-220
Input DC		
Max. input voltage	1100 V	
Rated voltage	450 V	
Start-up voltage	195 V	
MPPT voltage range	180 - 1000 V	
Max. input current	6 × 32 A	8 × 32 A
Max. short circuit current	6 × 40 A	8 × 40 A
MPPT number / Max. input strings number	6 / 12	8 / 16
Output AC		
Rated output power	50 kW	60 kW
Max. apparent output power	55 kVA	66 kVA
Max. output power	55 kW	66 kW
Rated grid voltage	3/(N)/PE, 220 V	
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	131.2 A	157.5 A
Max. output current	144.3 A	173.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Efficiency		
Max. efficiency	98.5%	
EU efficiency	98.1%	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Surge protection	DC Type II / AC Type II (AC Type I optional)	
Grid monitoring	Yes	
Anti-islanding protection	Yes	
Temperature protection	Yes	
Strings monitoring	Yes	
I/V Curve scanning	Yes	
Integrated AFCI 2.0	Optional	
Integrated PID recovery	Optional	
Integrated DC switch	Yes	
Integrated AC switch	Optional	
General Data		
Dimensions (W × H × D)	1065 × 567 × 344.5 mm	
Weight	89 kg	
Topology	Transformerless	
Self-consumption (night)	< 2 W	
Operating ambient temperature range	-30 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Cooling concept	Intelligent fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	IEC 61727, IEC 62116, C10/11, VDE 4105, VDE-AR-N 4110, IEEE 1547	
Safety / EMC standard	IEC62109-1/-2, EN61000-6-1/-2/-3/-4, UL1741	
Features		
DC connection	MC4 connector	
AC connection	OT terminal (max. 185 mm²)	
Display	LCD	
Communication	RS485. Optional: Wi-Fi, GPRS, PLC	