9.2 Cleaning

Warning

- Before starting cleaning of inverter, please ensure that DC switch is turned off and the AC breaker present between GTI-SERIES inverter and grid is also turned off. After switching off the DC switch and AC breaker wait for atleast **5 minutes** to avoid risk of electric shock.

Caution

- Risk of burns due to hot heatsink
- The heatsink may exceed 70^{0}C during operation. Do not touch the heat sink during operation Wait atleast **30 minutes** before cleaning until the heat sink has cooled down
- Do not use water, corrosive chemicals or detergent to clean inverter and heatsink
- Please clean the inverter with an air blower, a dry & soft cloth or a soft brush
- Please ensure that there is enough space around the heatsink for ventilation. Inspect the heat sink for blockage (dust, snow, etc.) and clean them if they exist using an air blower, a dry and soft cloth

10. Decommissioning of inverter

- Turn OFF AC breaker
- Turn OFF DC switch
- Wait till i) Alarm LED turn OFF ii) LCD light turn off
- Wait for approx. **30 minutes** before touching Inverter. Surface may be hot
- Remove DC cables
- Unscrew AC connector
- Remove AC cables
- Unlock communication gland
- Remove RS485, Dry contact DI terminal connection if you have done any
- Unscrew mounting screws to remove inverter from wall
- Pack inverter in carton which is provided during purchase. If that carton is not available then use equal size carton
- Adopt E-waste Regulation guideline while disposing faulty inverter. Do not dispose inverter with household waste

11. Technical specifications

11.1 Three phase

RATINGS	3kW	5kW	6kW	7kW	7.5kW	8kW	10kW
Models	GTI0033PN401	GTI0053PN401 GTI0053PN402	GTI0063PN402	GTI0073PN402	GTI007X53PN402	GTI0083PN402	GTI0103PN402
INPUT SPECIFICATIONS (DC)							
Max. allowable PV power (kW)*	4.5	7.5	9	10.5	11.25	12	15
Nominal PV voltage (V)	600						
Max. DC input voltage (V)	1100						
Start-up voltage (V)	140						
Operating range (V)	120-1000						
MPPT voltage range (V)	120-1000						
Max input current per MPPT (A)	22	22 / 22+22	22+22				
Number of MPPT	1	1 / 2	2				
String per MPPT tracker	1						
Maximum PV short circuit current per MPPT (Isc)	30	30 / 30+30	30+30				
OUTPUT SPECIFICATIONS (AC)							
Rated output power (kW)	3	5	6	7	7.5	8	10
Max. AC power (kVA)	3.3	5.5	6.6	7.7	8.25	8.8	11
Nominal AC current, RMS (A)	4.16	6.94	8.33	9.72	10.41	11.11	13.88
Max. output current (A)	4.8	8	9.66	11.27	12.07	12.88	16
Grid voltage range (V)	216-264 / 374-457						
Grid frequency range (Hz)	50						
Power factor (at rated output power)	>0.99 (Adjustable from 0.8 leading to 0.8 lagging)						
Total harmonic distortion (THDi)	<3% at rated load						
Feed-in phase / Connection phase	3 phase, N, PE						
EFFICIENCY							
Max. efficiency (%)	98						
MPPT efficiency (%)	>99						
Euro efficiency (%)	97.5						
PROTECTIONS							
Surge protection	Type II SPD on AC and DC side						
Other protection	DC reverse polarity protection, Short circuit protection, Over current protection, Over voltage / Under voltage protection, Over frequency / Under frequency, Insulation resistance monitoring, Residual current detection, Surge protection, Anti-Islanding protection, Temperature protection						
Integrated DC switch	Yes						
Integrated AFCI (DC ARC-Fault circuit protection)	Optional						
INTERFACE							
DC connection	MC4 connectors						
Display	LCD with LED indication						
Datalogger & Communication	RS485 (default) / Wi-Fi / GSM (To be ordered along with inverter separately)						
Topology	Transformerless						
Consumption @ night (W)	<1						
Operating temperature range	-25 °C to +60 °C						
Cooling method	Natural convection						
Relative humidity	0 to 100% non-condensing						
Max. operational altitude	4000m						
Noise (dBA)	<30						

RATINGS	3kW	5kW	6kW	7kW	7.5kW	8kW	10kW
Models	GTI0033PN401	GTI0053PN401 / GTI0053PN402	GTI0063PN402	GTI0073PN402	GTI007X53PN402	GTI0083PN402	GTI0103PN402
Designed lifetime	<20 years						
Warranty**	7 years						
Ingress protection	IP65						
Dimensions in mm (W*H*D)	285x502x178						
Net weight (Kg)	12						
Mechanical integration	Wall mountable						
Safety	IS 16169 : 2019 / IEC 62116 : 2014, IS 16221 (part 2) : 2015 / IEC 62109-2 : 2011						
Environmental	IEC 60529						
Electrical	IS 17980 : 2022 / IEC 62891 : 2020, IEC 61000						

Note: Subject to max allowable MPPT voltage & PV current.*
If product is registered on app within 15 days of commissioning.**

11.2 Tightening torque required

AC terminal	0.5 Nm
Smart Meter & RS485 cover screw	0.2 Nm
Earthing screw	2 Nm

Table 12

11.3 Order code for accessories and variant

In the following table you will find the optional accessories for your product. If required you can order these from Selec Controls Pvt. Ltd.

Name	Description	Selec order code
WiFi device	Communication interface	AC-S2W-GTI-2
GSM device	Communication interface	AC-S2G-2
3kW 5kW	Single MPPT inverter variants	GTI0033PN401 GTI0053PN401
5kW 6kW 7kW 7.5kW 8kW 10kW	Dual MPPT inverter variants	GTI0053PN402 GTI0063PN402 GTI0073PN402 GTI007X53PN402 GTI0083PN402 GTI0103PN402

Table 13