

HEATING PERFORMANCE	
COGENERATOR MODEL	Micro – mod. GW7.18 CA
HEAT POWER	18 Kwth* (+/- 5%) (@ out 75°C), 20kWth @60°C out macchina
MAX HYDRAULIC FLOW (CLIENT SYSTEM)	40 lt/min – 2.4mc/h
WATER COOLING CHARACTERISTIC	Water and glycole 30% mixture
Dt max	6.3°C (~) (+/-2%)
WATER CIRCUIT CONNECTIONS TYPE	G1"
MAX TEMPERATURE WATER RECCOMANDED	75°Cmax (85°C with reduction water flow on customer system)

HEAT PLATE EXCHANGER	
EXCHANGER TYPE	Braze welded plates
WATER COOLANT VOLUME IN EXCHANGER	2.6 lt
HYDRAULIC LOAD LOSSES	25 kPa
MAX PRESSURE CLIENT'S HYDRAULIC SYSTEM	4.5 bar
MATERIAL HEAT EXCHANGER	AISI 316
INPUT WATER FILTER	From client
HYDRAULIC PUMPS ON CLIENT SYSTEM	From client. Turn on /off signal from machine

CONSUMPTIONS AND FUEL CHARACTERISTIC	
CONSUMPTION	27.3kW (+/- 3%)
FUEL TYPE	METANO
Hi	34.71 Mj/smc
FUEL DENSITY	0.707 kg/smc
FUEL PRESSURE SUPPLY	10 mbar

OVER TEMPERATURE PROTECTION SETPOINT	
T1 sensor (water cooling out from exhaust gas HE)	IF T1>= 93°C → STOP engine
T2 sensor (water cooling in engine)	IF T1>80°C → STOP engine
T1 & T2	T1-T2 >=40°C → STOP engine
T3 sensor (box engine volume)	T3>=90°C → STOP engine
T3a thermostat sensor (box engine)	T3a>=90°C → STOP engine

ELECTRIC CHARACTERISTIC	
ELECTRIC POWER PRODUCTION	7.08 kWel
OUTPUT VOLTAGE FROM MACHINE – input INVERTER (DC)	490V DC (max 600V DC at open circuit)
MAX CURRENT DC LINE	14 A
SC LINE PROTECION TYPE	Fuse 20A
ALTERNATOR PROTECTION (AC LINE)	Int. Mag. Term. Reg. 20A-C 3p
ALTERNATOR TYPE	Brushless As. 250Hz . Raff. Air or liquid
INVERTER GENERAL CHARACTERISTICS	Inverter DC – AC 660VDC max input

PROTECTION INTERFACE GRID	Inside inverter
PROTOCOL COMMUNICATION OUTPUT DATUM INVERTER	BUS 485 RTU

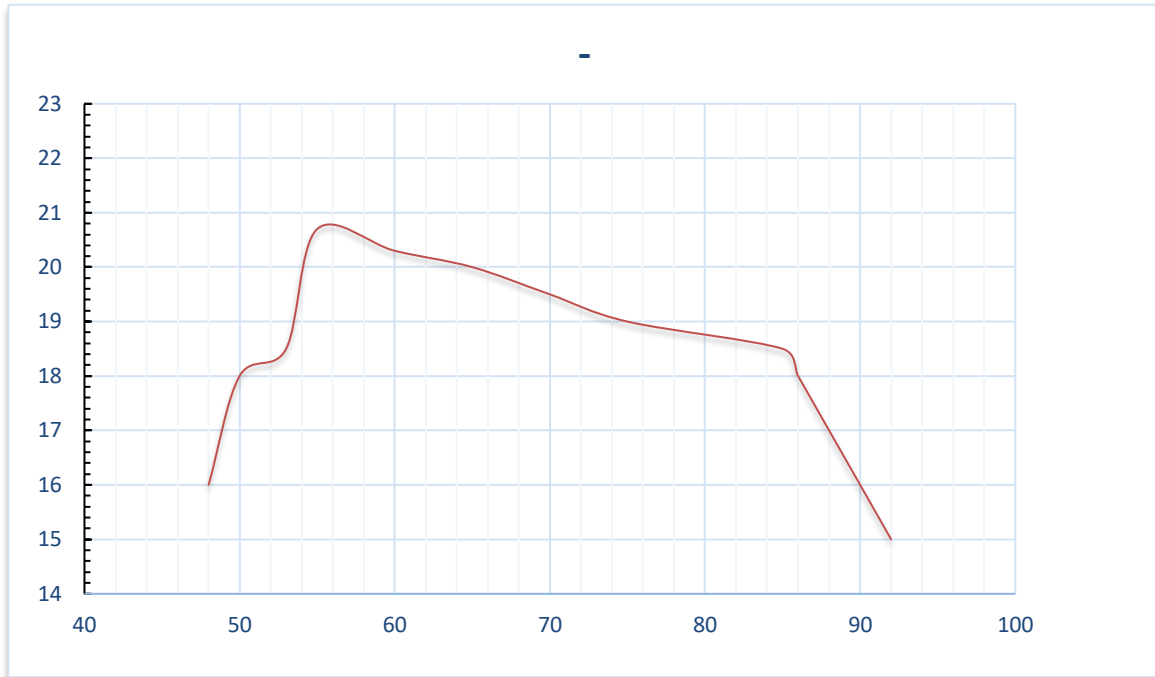
AUXILIARY ELECTRIC CONNECTIONS	
AUXILIARY CONSUMPTION	175W
VOLTAGE SUPPLY FOR AUXILIARY CIRCUIT	120V 60Hz
MAX ABSORBER CURRENT	0.78 A
GENERAL PROTECTION / SWITCH	Sez. 40 A
CONNECTION WIRE TYPE	External terminal
MAX SECTION WIRE	2x2.5mmq (max) + terra
ELECTRIC CABINET OF MACHINE	Remotable up to 4mt from machine (optional) IP47

MACHINE COMMUNICATIONS	
CONNECTIVITY	Dynamic IP address
3G 4G CONNECTIVITY	With USB dongle dedicate
WiFi Connectivity	IP address with customer setup, std 802.11

ENGINE CHARACTERISTIC	
ENGINE TYPE	VW 2.0lt
RPM – SPEED	1300-1600 min ⁻¹
MECHANICAL SHAFT LOAD	56.74 Nm
LAMBDA	1
EXHAUST GAS TEMPERATURE FROM ENGINE	505°C
EXHAUSTE GAS TEMPERATURE AFTER CATALYSER	545°C
MAX OUTPUT TEMPERATURE FROM MACHINE	120°C (with water client's system temp. To >85°C)
EMISSIONS (cat. Oss.) ref. 5%O₂	
NO_x	40 ppm
HC	0.092 g/Nmc
CO	30ppm
MAX PRESSURE ON EXHAUSTE GAS OUTPUT PIPE	30 mbar

GENERAL MACHINE CHARACTERISTIC	
GENERAL DIMENSION (except electric cabinet machine)	1080 x 754 x 1030 (mm)
GENERAL EFFICIENCY	91.6% (+/-5%)
ELECTRIC EFFICIENCY	25.6% (0+2%)
HEAT EFFICIENCY	66% (+/-5%)

Diagram of heat power performance in dependent to water coolant temperature on client's system.



The heat power output production it's mesured in laboratory conditions test.

OTHER GENERAL CHARACTERISTICS	
MAX TEMPERATURE ENGINE BOX	82°C @12h after work, with external temp. @26°C amb.
NOISE LOAD	59.5 dB(a)
MAX WEIGHT	404kg

TECHNICAL LAW REFERENCE	
TECHNICAL DIRECTIVE FOR ELECTRIC CONNECTION AT GRID	UL 1724