

# **GSW-705 T5**

**INDUSTRIAL RANGE Powered by SCANIA** 



SERVICE		PRP	
POWER	kVA	703	
POWER	kW	563	
RATED SPEED	r.p.m.	1.500	
STANDARD VOLTAGE	V	400/230	
AVAILABLE VOLTAGES	V	230/132 · 230 V (t)	
RATED AT POWER FACTOR	Cos Phi	0,8	



## INDUSTRIAL RANGE

GENELEC Company with quality certification ISO 9001 Version 2015

Les groupes électrogènes GENELEC sont conformes au marché CE qui comporte les directives suivantes :

- 2006/42/CE: 2008 Sécurité des machines
  2014/30/UE de compatibilité électromagnétique
  2014/35/UE matériel électrique destiné à être employé dans certaines limites de 2000/14/CE émission sonore de machines à usage à l'air libre (modifiée par
- 2005/88/CE) 97/68/EC Emissions of gaseous and particulate pollutants. (amended by 2012/46/EU) EN 12100, EN 13857, EN 60204

Ambient conditions of reference according to ISO 8528-1:2018 normative: 1000 mbar,  $25^{\circ}\text{C}$ ,  $30^{\circ}$  relative humidity.

Prime Power (PRP):

According to ISO 8528-1:2018, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24 h of operation shall not exceed 70 % of the PRP.

Emergency Standby Power (ESP):
According to ISO 8528-1:2018, Emergency standby power is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP

G2 class load acceptance in accordance with ISO 8528-5:2013



## STANDARD SOUNDPROOFING





WATER-COOLED



THREE PHASE



50 HZ



NON REQUIRED 97/68



DIESEL

Genelec has the right to modify any feature without prior notice.

Weights and dimensions based on standard products. Illustrations may include optional equipment.

Technical data described in this catalogue correspond to the available information at the moment of printing.

The illustrations and images are indicative and may not coincide in their entirety with the product.

Industrial design under patent.









## Engine Specifications | 1.500 r.p.m.

Rated Output (PRP)	kW	596
Manufacturer		SCANIA
Model		DC16-78A(02-43)
Engine Type		4-stroke diesel
Injection Type		Direct
Aspiration Type		Turbocharged and after-cooled
Number of cylinders and arrangement		90° V8
Bore and Stroke	mm	130 x 154
Displacement	L	16,4
Cooling System		Coolant
Lube Oil Specifications		ACEA E3,E4,E5 or E7
Compression Ratio		16,7:1

Fuel Consumption ESP	l/h	154,98
Fuel Consumption 100% PRP	l/h	137,92
Fuel Consumption 75 % PRP	l/h	102,36
Fuel Consumption 50 % PRP	l/h	68,24
Lube oil consumption with full load	g/kWh	0,2
Total oil capacity	L	48
Total coolant capacity	L	68
Heat dissipated by coolant	kW	229
Governor	Туре	Electrical
Air Filter	Туре	Dry



- Diesel engine
- 4-stroke cycle
- Water-cooled
- 24V electrical system
- Water separator filter (visible level)
- Dry air filter
- Radiator with pusher fan
- HTW sender
- LOP sender
- Radiator water level sensor
- Electronic governor
- Hot parts protection
- Moving parts protection



## Generator Specifications | STAMFORD

Manufacturer		STAMFORD
Model		HCI634G
Poles	No.	4
Connection type (standard)		Star-series
Mounting type		S-1 14"
Insulation	Class	H class

IEC-34-5)	IP23
Exciter system	Self-excited, brushless
Voltage regulator	A.V.R. (Electronic)
Bracket type	Single bearing
Coupling system	Flexible disc
Coating type	Standard (Vacuum impregnation)



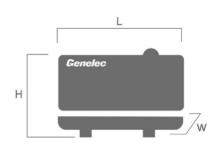
- Self-excited and self-regulated
- IP23 protection
- H class insulation





## **WEIGHT AND DIMENSIONS**

		Standard Version	High Capacity version
Length (L)	mm	4.500	4.500
Height (H)	mm	2.340	2.740
Width (W)	mm	1.800	1.800
Maximum shipping volume	m³	18,95	22,19
Weight with liquids in radiator and sump	Kg	5627	6238
Fuel tank capacity	L	740	2090
Autonomy	Hours	7	20
Sound pressure level	dB(A)@7m	83 ± 2,4	83 ± 2,4
		Steel tank	Steel tank



## APPLICATION DATA

## **EXHAUST SYSTEM**

Maximum exhaust temperature	°C	578
Exhaust Flange Size (external diameter)	mm	160
Heat dissipated by exhaust pipe	kW	480

## **NECESSARY AMOUNT OF AIR**

Intake air flow	m³/h	2233,92
Cooling Air Flow	m³/s	19,37
Alternator fan air flow	m³/s	1,614

## STARTING SYSTEM

Starting power	kW	7
Starting power	CV	9,52
Auxiliary Voltage	Vdc	24

## **FUEL SYSTEM**

Fuel Oil Specifications		Diesel
Fuel Tank	L	740
Other fuel tank capacities	L	2.090



#### • Steel chassis

- Anti-vibration shock absorbers
- Chassis with integrated fuel tank
- Fuel level gauge
- External emergency stop switch
- Bodywork made from high quality steel plate
- High mechanical strength
- Low noise emissions level

- Soundproofing provided by high-density volcanic rock wool
- Epoxy polyester powder coating
- Full access for maintenance (water, oil and filters, no need to remove the canopy)
- Reinforced lifting hooks for crane hoisting
- Watertight chassis (acts as a double barrier against liquid retention)
- Fuel tank drain plug
- Chassis drain plug
- Chassis ready for future mobile kit installation

## Soundproofed version

- Steel residential silencer -35db(A) attenuation.
- Oil sump extraction kit
- Versatility to assemble a high capacity chassis with a metallic fuel tank
- IP Protection according to ISO 8528-13:2016
- 3 way valve for external fuel supply (available in 1/2" and 3/8" fittings) (Opcional).
- Fuel transfer pump (Opcional).







# FEATURES OF THE CONTROL UNITS

		CEM 7	CEA 7	CEC 7	CEM7 + CEC7
	Voltage between phases	•	•	•	•
	Voltage between neutral and phase	•	•	•	•
	Current intensities	•	•	•	•
i. E	Frequency	•	•	•	•
Readin	Apparent power (Kva)	•	•	•	•
<u>.</u>	Active power (Kw)	•	•	•	•
era,	Reactive power (kVAr)	•	•	•	•
ē	Power factor	•	•	•	•
	Voltage between phases		•	•	•
	Voltage between phases and neutral		•	•	•
	Current intensities		•	•	•
	Frequency		•	•	•
ī. g	Apparent power		•		
Readings	Active power		•		
Ø	Reactive power		•		
Z	Power factor		•		
	Coolant temperature	•	•		•
ø	Oil pressure	•	•		•
Readings	Fuel level (%)	•	•		•
Bea	Battery voltage	•	•		•
är	R.P.M.	•	•		•
Engin	Battery charge alternator voltage	•	•		•
	High water temperature	•	•		•
	High water temperature by sensor	•	•		•
	Low water temperature by sensor	•	•		•
	Low oil pressure	•	•		•
	Low oil pressure by sensor	•	•		•
	Low water level	•	•		•
	Unexpected shutdown	•	•		•
	Fuel storage	•	•		•
	Fuel storage by sensor	•	•		•
	Stop failure	•	•		•
	Battery voltage failure	•	•		•
Protections	Battery charge alternator failure	•	•		•
tect	Overspeed	•	•		•
	Underspeed	•	•		•
Engine	Start failure	•	•		•
Ē	Emergency stop	•	•	•	•

Standard

Optional







		CEM 7	CEA 7	CEC 7	CEM7 + CEC7
	High frequency	CEM 7	CLA /	•	CENTY 1 CECY
		•	•	•	•
	Low frequency  High voltage	•	•	•	•
		•	•	•	•
8	Low voltage Short-circuit	•	•		•
ğ		•	•	•	•
7	Asymmetry between phases	•	•	•	•
ē.	Incorrect phase sequence	•	•		•
natc	Inverse power	•	•		•
Alter	Overload	•	•	•	•
	Genset signal drop  Total hour counter	•	•	•	•
		•	•	•	•
	Partial hour counter				
_	Kilowatt meter	•	•	•	•
ters	Starts valid counters	•	•	•	•
Ğ	Starts failure counters	•	•	•	•
<u> </u>	Maintenance	•	•	•	•
	RS232	0	0	0	0
	RS485	0	0	0	0
	Modbus IP	0	0	0	0
	Modbus	0	0	0	0
	CCLAN	0	0		0
	Software for PC	0	0	0	0
20	Analogue modem	0	0	0	0
cati	GSM/GPRS modem	0	0	0	0
Ē	Remote screen	0	<b>0</b>		0
<u> </u>	Tele signal	<b>()</b> (8 + 4)	<b>(8 + 4)</b>		① (8 + 4)
ပိ	J1939	0	0		0
	Alarm history	(10) / (opc. +100)	(10) / (opc. +100)	• (10) / (opc. +100)	(10) / (opc. +100)
	External start	•	•	•	•
	Start inhibition	•	•	•	•
	Mains failure start		•	•	•
	Start under normative EJP	•	•		•
	Pre-heating engine control	•	•		•
	Genset contactor activation	•	•	•	•
	Mains & Genset contactor activation		•	•	•
	Fuel transfer control	•	•		•
	Engine temperature control	•	•		•
	Manual override	•	•		•
	Programmable alarms	•	•		•
g	Genset start function in test mode	•	•	•	•
tur	Programmable outputs	•	•		•
Hea	Multilingual	•	•	•	•
	GPS Positioning	0	0		0
	Synchronisation	0	0		0
SC	Mains synchronization	0	0		0
otio	Second Zero elimination	0	0		0
Ţ	RAM7	0	0		0
ecia –	Remote screen	0	0		0
Ö	Programming timer	0	0		0

Standard

Optional









## CONTROL **PANELS**



#### **M5**

Digital manual Auto-Start control panel and thermal magnetic protection (depending on current and voltage) and differential with CEM7.

Digital control unit CEM7



## AS5

Automatic panel WITHOUT transfer switch and WITHOUT mains control with CEM7 unit. (\*) AS5 as optional with CEA7 unit. Automatic panel without transfer switch and WITH mains control.





## CC2

Himoinsa Switching cabinet WITH display.

Digital control unit CEC7



## AS5 + CC2

Automatic panel WITH transfer switch and with mains control. The display will be on the genset and on the cabinet.

Digital control unit CEM7+CEC7



## AC5

Automatic mains failure control panel. Wall-mounted cabinet WITH transfer switch and thermal magnetic protection (depending on current and voltage).

Digital control unit CEA7



#### Electric control and power panel with measurements devices and control unit (according to necessity and configuration)

- 4-pole thermal magnetic circuit breaker
- Battery Switch

- Adjustable earth leakage protection (time & sensitivity) standard in M5 and AS5, with thermal magnetic protection
- Battery charger (standard on gensets with automatic control panels)
- Heating resistor (standard on sets with automatic control panels)

## Electrical system

- Battery charger alternator with ground connection
- Starter battery/ies installed (cables and bracket included)
- Ground connection electrical installation with connection ready for ground spike (not supplied)

