.TLC Telecom

Power range 10-60 kVA

Generating sets 1500-1800 RPM - 50/60Hz - 400-230 V/480-277 V 48 VDC

ELCOS
POWER GENERATORS

CAPEX and OPEX Reduction

Anti-theft system

According to the customer's needs

Generating sets designed for Telecom Sites

The TLC generators are built to offer
Low Maintenance,
Extended Maintenance Intervals,
Long Runtime, Unattended Running

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.TLC

Power range **10-60** kVA

Generating sets 1500-1800 RPM - 50/60Hz - 400-230 V/480-277 V 48 VDC

High performance

TLC generators are created to offer Long runtime, to be easily repaired and to perform with high performance efficiency.

CAPEX and OPEX reduction

Fully factory tested and built according to the customer requirements. TLC generators reduce CAPEX and OPEX thanks to a long life design.

Extended service intervals and unattended running

Designed to operate in all environmental conditions (ambient temperature from -10°C up to 52 °C).

Engine and Alternator Brands

Perkins | DEUTZ | YANMAR | STAMFORD | LINZ ELECTRIC

Reliable and Efficient Power Solutions

ELCOS Gensets for Telecom Sites combine the reliability and the versatility that TLC companies need.

This well engineered and easy to use generator provides High performance, Long runtime, CAPEX and OPEX reduction and Extended services intervals.

This range is the result of research and development to design a solution to ensure a versatile and highly reliable product to Telecommunications Companies.

The Gensets are available in different arrangements:

AC / DC / Hybrid Systems.

Applications

These generators can be used in a variety of applications, such as:

- -Telecom sites
- -Cell sites
- -Remote areas
- -Telecom towers
- - Mains failure
- - Dual systems
- - DC system -48 VDC
- - Batteries charger

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CE | FM APPROVED | QAIC/IT/91790-A | RoHS 2 2011/65/EU

.TLC

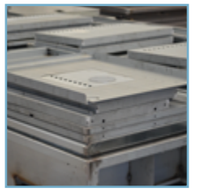
Power range **10-60** kVA

Generating sets 1500-1800 RPM - 50/60Hz - 400-230 V/480-277 V 48 VDC

Oil · Water · Air Cooling

Document holder
protects documents supplied with the GS

Tank hatch
with key lock cap and warning light



Galvanized metal sheet to increase strength and durability

External oil drain point allow to change oil easily

Central lifting hook
for easy lifting

Super Silent galvanized canopy
Insulated with soundproofing Class 1 rated material

dbA

Lockable Snap handles

Integrated fuel Big tank made of polypropylene
with bunded base

Dismountable Gen Set
The tank and canopy module can be disassembled to allow easy transport operations

Reinforced anti-rollover forklift tunnels
for safe handling

Suitable for DUMMY LOAD

+011
+010

VARIANT WITH OR WITHOUT ATS

UNATTENDED RUNNING

FUEL THEFT PREVENTION SYSTEM

Engines selected from the Heavy duty product range and optimized for low quality fuel
Alternator 3 Phase and Single-Phase with AVR (+/-1%)I AC/DC Rectifier I Optimized for Telecommunications Needs

Control Panel
IP 55 control panel managed by the Polyvalent ELCOS MC4 controller or a alternative by DSE 7320 MKII controller

Easy to service
Inspection doors with airtight gasket and document holder to overtime protect the panel

Theft prevention system special equipment:
Optical laser fuel sensor to be warned if the fuel level drops suddenly
Security Anti-siphon device

Exhaust terminal pipe with tilting cap rain cover

Snap handles with key lock
to offer maximum security and protection

Automatic stop system
due to lack of fuel

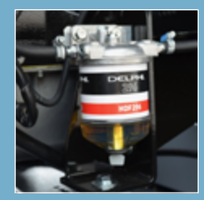
Tank inspection hatch
to inspect the tank during maintenance

Anti-vibration pads
attenuate the vibrations caused by the unit

Exhaust pipes
with exhaust heat wrap for high-performance and security

Bunded base
enviromental friendly to contain the liquids in the event of a spill

External Tank connections
easy to use and to connect



Fuel/Water Separator Filter
removable for places where space is limited

Emergency stop button
it shuts down the generating set immediately

QPE

POLYVALENT PANEL

Applications

- Auto-production (island)
- Construction site
- Rental
- Emergency to the mains

MC4# evo

➔ Controls

- Manual start up and stop
- Automatic start up and stop from AMF
- Start up and stop through contact
- Fuel pump control
- Lock ● Reset
- Programmable automatic test
- Emergency stop button
- Main counter command closed
- G.s. counter command closed

➔ Engine Measures

- Engine RPM*
- Engine oil pressure BAR
- Engine oil temperature*
- Engine oil level*
- Cooling system pressure*
- Cooling system temperature°C
- Coolant level %
- Fuel consumption*
- Fuel level %
- Total operating hours
- Partial operating hours (resettable)
- Hours to maintenance
- Battery charger voltage
- Start up counter

➔ Communication Interfaces

- CAN-BUS communication
- USB port for saving parameters and firmware updates
- RS485 serial output

➔ Equipment

- Microprocessor logic
- Backlit refractive display
- 16-event alarm history list
- Multi-language management
- Troubleshooting with suggestions

➔ Alternator Measures

- Genset voltage three-phase
- Genset star voltage RN.SN.TN.
- Genset three-phase current
- Genset frequency
- Genset apparent power KVA
- Genset actual power KW
- Genset reactive power KWr
- Genset KWh
- Genset power factor cosfi

➔ Main Measures

- Mains voltage RST
- Mains frequency

➔ Signals/Protections

- Failed to start
- Failed to stop
- Low oil level*
- Low oil pressure
- Minimum oil pressure (pre-alarm)
- Low cooling liquid level
- Very high cooling liquid level
- High temperature (pre-alarm)
- Generator battery charger
- No fuel
- Low fuel level (pre-alarm)
- Start up
- Stop
- Fuel pump running
- Battery connected
- Battery charging
- Battery undervoltage
- Battery overvoltage
- Genset overvoltage
- Genset undervoltage
- Genset overload
- Genset short circuit
- Genset maximum frequency
- Genset minimum frequency
- Genset connected
- Genset contactor closed
- Circuit breaker protection
- Mains connected
- Mains overvoltage
- Mains undervoltage
- Mains contactor closed
- Emergency button pressed

Variant +011

Without integrated switching

With this variant the SWITCHING is externally managed through separate ATS panels (optional).

Variant +010

With integrated switching

With this variant the SWITCHING is INTEGRATED and connected on board in order to have a unique and complete emergency power system.

DSE 7320 MKII

➔ Controls

- Dual generator functionality
- Manual start up and stop
- Automatic start up and stop from AMF
- Start up and stop through contact
- Fuel pump control (optional)
- Lock
- Reset
- Programmable automatic test
- Emergency stop button
- Main counter command closed
- G.s. counter command closed

➔ Engine Measures

- Engine RPM
- Engine oil pressure BAR (optional)
- Engine cooling system temperature °C (optional)
- Fuel level %
- Total operating hours
- Hours to maintenance
- Battery voltage
- Start up counter

➔ Communication Interfaces

- CAN-BUS communication
- 8-relay module (optional)
- GSM remote management modem
- Remote SCADA monitoring via DSE Configuration Suite PC software
- RS 232 serial output
- RS485 serial output
- USB connectivity

➔ Alternator Measures

- Genset voltage three-phase
- Genset star voltage RN.SN.TN.
- Genset three-phase current
- Genset frequency
- Genset apparent power KVA
- Genset actual power KW
- Genset reactive power KWr
- Genset KWh
- Genset power factor cosfi

➔ Equipment

- Microprocessor logic
- Backlit refractive display
- Configurable event log (250)
- Multiple date and time scheduler
- PLC editor

➔ Main Measures

- Mains voltage RST
- Mains frequency

➔ Signals/Protections

- Failed to start
- Failed to stop
- Low oil pressure
- Low cooling liquid level
- Very high cooling liquid level
- Generator battery charger
- No fuel
- Low fuel level (pre-alarm)
- Start up
- Stop
- Fuel pump running (optional)
- Battery connected
- Battery charging
- Battery undervoltage
- Battery overvoltage
- Genset overvoltage
- Genset undervoltage
- Genset overload
- Genset short circuit
- Genset maximum frequency
- Genset minimum frequency
- Genset connected
- Genset contactor closed
- Mains connected
- Mains overvoltage
- Mains undervoltage
- Mains contactor closed
- Emergency button pressed

ELCOS

GE.TLC

Power Generators 10 - 60 kVA

1500/1800 RPM DIESEL

50 /60 HZ 400 - 230 V/480-277 V 48 VDC

	LTP kva		PRP kva												
	50 HZ	60 HZ	50 HZ	60 HZ	BRAND	CODE	COOLING	STAGE	GOVERNOR	DIMENSIONS - L x W x H	WEIGHT kg	TANK lt	LOAD@75% -h	NOISE @ 7 m	A
10 kVA															
GE.PK.011\010.TLC	10	-	9	-	Perkins	403A-11G1	W50°	Stage 0	M	195x90x180	898	600	261	57	16
GE.YA.011\010.TLC	11	12	10	11	Yanmar	3TNV76	W50°	Stage 3A	M	195x90x180	811	600	334	57	16
13 kVA															
GE.DZ.014\013.TLC	14	16	13	15	Deutz	F2M 2011	Oil	Stage 2	M	195x90x180	939	600	231	58	25
GE.DZA.014\013.TLC	14	16	13	15	Deutz	F2L 2011	Air	Stage 2	M	195x90x180	918	600	223	60	25
GE.PK.016\013.TLC	15	-	13	-	Perkins	403A-15G1	W50°	Stage 0	M	195x90x180	909	600	215	57	25
15 kVA															
GE.PK.017\015.TLC	17	19	15	17	Perkins	403A-15G2	W50°	Stage 0	M	195x90x180	915	600	194	57	25
GE.YA.017\015.TLC	17	19	15	17	Yanmar	3TNV88	W50°	Stage 3A	M	195x90x180	875	600	231	57	25
20 kVA															
GE.DZ.021/020.TLC	22	25,3	21	24	Deutz	F3M 2011	Oil	Stage 2	M	195x90x220	1037	1000	244	58	32
GE.DZA.021/020.TLC	22	25,3	21	24	Deutz	F3L 2011	Air	Stage 2	M	195x90x220	1015	1000	244	60	32
GE.PK.022/020.TLC	22	-	20	-	Perkins	404A-22G1	W50°	Stage 0	M	195x90x220	1015	1000	250	58	32
GE.YA.022/020.TLC	22	25	20	23	Yanmar	4TNV88	W50°	Stage 3A	M	195x90x220	945	1000	250	61	32
30 kVA															
GE.DZ.035\030.TLC	35	37,5	30	35,7	Deutz	F4M 2011	Oil	Stage 2	M	195x90x220	1149	1000	179	63	50
GE.DZA.035\030.TLC	35	37,5	30	35,7	Deutz	F4L 2011	Air	Stage 2	M	225x110x215	1264	1000	170	63	50
GE.PK.034\031.TLC	33	38	30	35	Perkins	1103A-33G	W50°	Stage 0	M	195x90x220	1252	1000	179	64	50
GE.YA.037\033.TLC	37	38	33	35	Yanmar	4TNV98	W50°	Stage 3A	M	195x90x220	1091	1000	193	63	50
40 kVA															
GE.DZ.044\040.TLC	44	50	40	48	Deutz	BF4M 2011	Oil	Stage 2	M	225x110x215	1303	1000	157	63	63
GE.DZA.044\040.TLC	42	50	40	48	Deutz	BF4L 2011	Air	Stage 2	M	225x110x215	1295	1000	122	63	63
GE.YA.044\040.TLC	44	49	40	46	Yanmar	4TNV98T	W50°	Stage 2	M	225x110x215	1252	1000	143	62	63
50 kVA															
GE.DZA.050\047.TLC	50	57	47	54	Deutz	F4L 914	Air	Stage 0	M	225x110x215	1319	1000	132	63	80
GE.PK.051\046.TLC	50	60	45	54	Perkins	1103A-33TG1	W50°	Stage 0	M	225x110x215	1510	1000	122	64	80
60 kVA															
GE.DZ.066\060.TLC	65	-	62	-	Deutz	BF4M 2011C	Oil	Stage 2	M	225x110x215	1435	1000	106	66	100
GE.DZA.066\060.TLC	65	74	60	66	Deutz	F6L 912	Air	Stage 0	M	225x110x215	1600	1000	103	67	100
GE.PK.067\061.TLC	66	75	60	69	Perkins	1103A-33TG2	W50°	Stage 0	M	225x110x215	1556	1000	97	64	100

	KW		A												
	MAX	MIN	MAX	BRAND	CODE	COOLING	STAGE	GOVERNOR	DIMENSIONS - L x W x H	WEIGHT Kg	TANK lt	RUNTIME at 75% - h	NOISE @ 7 m	SYSTEM	VOLTAGE
GDC															
GE.PK.10/05.TLC	9	5	155	Perkins	403D-07	W50°	Stage 3A	E	195x90x180	940	600	2.3	56/62	DC	48-58V
GE.PK.13/07.TLC	12	7	207	Perkins	403D-11	W50°	Stage 3A	E	195x90x180	1030	600	3	57/62	DC	48-58V
GE.PK.18/12.TLC	17	12	293	Perkins	403D-15	W50°	Stage 3A	E	195x90x220	1100	1000	4.2	58/63	DC	48-58V
GE.PK.22/18.TLC	22	18	380	Perkins	403D-22	W50°	Stage 3A	E	195x90x220	1180	1000	6.2	58/63	DC	48-58V

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