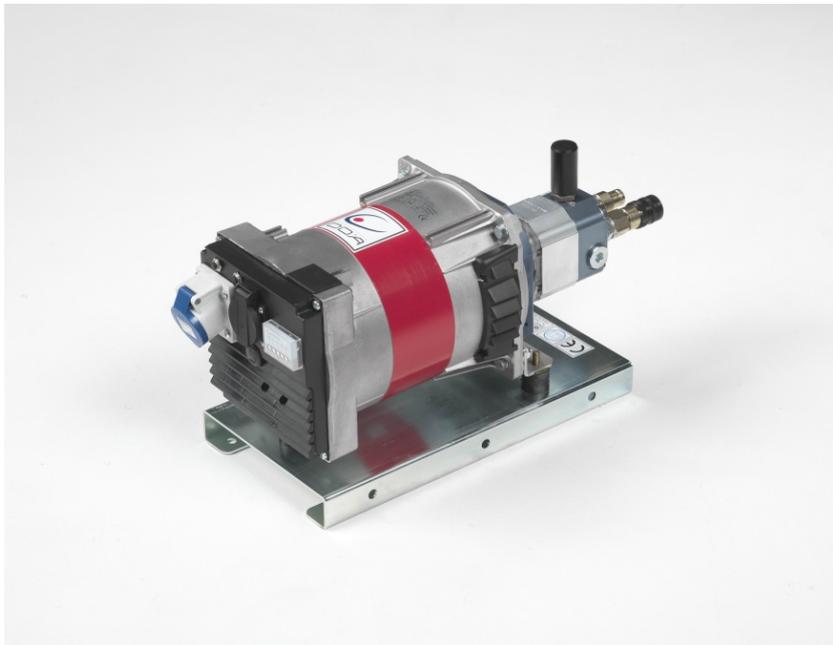




HG 3000 - HG 5000

ELECTRIC GENERATORS WITH HYDRAULIC MOTOR



HG 3000 - HG 5000 are compact hydraulic generators with power respectively of :
 3 KVA and 5 KVA - 230 volt - 50 HZ - AC
 They are ideal used as accessory of mini excavators, earth moving equipment, trucks, sky lifts, cranes, boats, mobile workshops and all machines equipped with sufficient hydraulic circuit. The connection to the machines is easy as the generators are hydraulically self regulated, two flexible hoses are sufficient and in few minutes your machine becomes a powerful generator that can power electric tools of all types, illuminate and also welding, avoiding the presence of gasoline engine generators with their associated problems of starting, maintenance, fuel availability, transport, exhaust fumes and noise.
 HG 3000 - HG 5000 are a high quality products that increase significantly the equipment versatility improving productivity and providing anywhere is necessary low cost and low maintenance electricity.

ADVANTAGES

- NO NOISE EMISSION - NO EXHAUST FUMES AND VIBRATIONS - LONG OPERATIVE LIFE - EXTREMELY LIGHT AND EASY TO TRANSPORT - MAINTENANCE VIRTUALLY INEXISTENT AND LOW RUNNING COSTS
- THE MINIMAL WEIGHT AND DIMENSIONS AND THE RATIONAL BASE CHASSIS ALLOW AN EASY INSTALLATION ON MACHINES
- HIGH QUALITY ALTERNATOR WITH R.C.B.O. PROTECTION, VOLTMETER
- THE EXCLUSIVE SELF REGULATED DOA GEAR MOTOR PROTECTS FROM ERRONEOUS ROTATION AND EXCESS OF FLOW AND SPEED

WEIGHT AND DIMENSIONS

	HG 3000	HG 5000
WEIGHT	25 kg	27 kg
HEIGHT	28 cm	28 cm
LENGTH	60 cm	60 cm
WIDTH	22 cm	22 cm

ELECTRIC CHARACTERISTICS

POWER	3 KVA - 5 KVA
VOLTAGE	230 Volt
FREQUENCY	50 Hz
CIRCUIT PROTECTION	R.C.B.O.
PROTECTION	IP 23

NOTE: DOA produces also generators with higher power or different electric characteristics of voltage /frequency. For special configuration contact DOA.

HYDRAULIC CHARACTERISTICS

	HG 3000	HG 5000
FLOW MIN-MAX	25 - 40 L/min	30 - 40 L/min
IDEAL FLOW	30 l/min	35 l/min
PRESSURE	210 Bar	210 Bar
BACKPRESSURE	max 17 bar	
EHTMA GROUP		

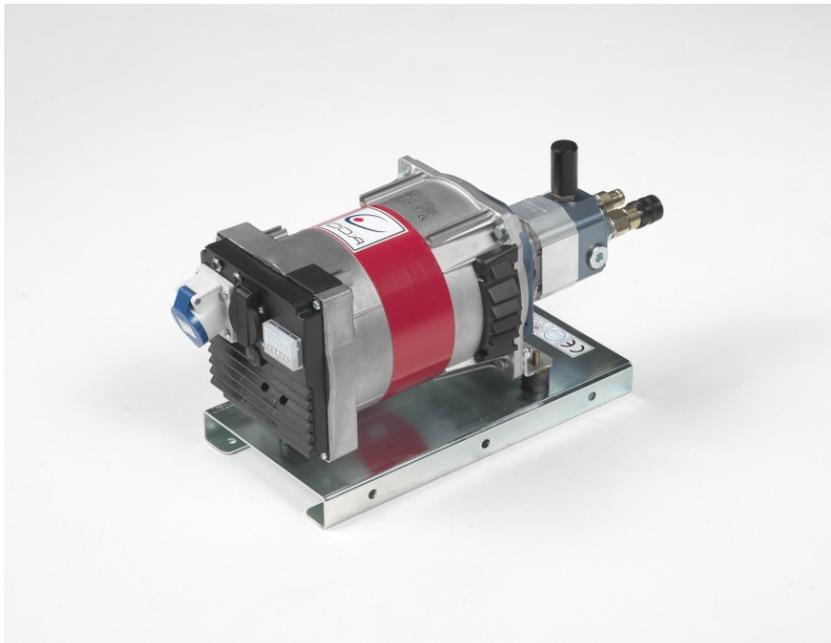


Detail of the exclusive hydraulic motor with integrated control valves



HG 3000 - HG 5000

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WEIGHT AND DIMENSIONS

	HG 3000	HG 5000
WEIGHT	25 kg	27 kg
HEIGHT	28 cm	28 cm
LENGTH	60 cm	60 cm
WIDTH	22 cm	22 cm

ELECTRIC CHARACTERISTICS

POWER	3 KVA - 5 KVA
VOLTAGE	230 Volt
FREQUENCY	50 Hz
CIRCUIT PROTECTION	R.C.B.O.
PROTECTION	IP 23

NOTE: DOA produces also generators with higher power or different electric characteristics of voltage /frequency. For special configuration contact DOA.

HYDRAULIC CHARACTERISTICS

	HG 3000	HG 5000
FLOW MIN-MAX	25 - 40 L/min	30 - 40 L/min
IDEAL FLOW	30 l/min	35 l/min
PRESSURE	210 Bar	210 Bar
BACKPRESSURE	max 17 bar	
EHTMA GROUP		



Detail of the exclusive hydraulic motor with integrated control valves

ELECTRIC GENERATORS WITH HYDRAULIC MOTOR



HG 7000 - HG 10000 are compact hydraulic generators with power respectively of :
HG7000 / 7 KVA in tri phase and 3 KVA single
HG10000 / 10 KVA in tri phase and 4 KVA single
 Their use is ideal as accessory of excavators, earth moving equipment, trucks, sky lifts, cranes, boats, mobile workshops and all machines equipped with sufficient hydraulic circuit.

The connection to machines is easy as the generators are self regulated, two flexible hoses are sufficient and in few minutes vehicles become powerful generators that can power electric machinery and tools of all type, avoiding the presence of gasoline engine generators with their associated problems of starting, maintenance, fuel availability, transport, exhaust fumes and noise.

HG 7000 - HG 10000 are quality products that increase significantly the equipment versatility improving productivity and providing anywhere is necessary low cost and low maintenance electricity.

ADVANTAGES

- NO NOISE EMISSION - NO EXHAUST FUMES AND VIBRATIONS - LONG OPERATIVE LIFE - EXTREMELY LIGHT AND EASY TO TRANSPORT - MAINTENANCE VIRTUALLY INEXISTENT AND LOW RUNNING COSTS
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WEIGHT AND DIMENSIONS

	HG 7000	HG 10000
WEIGHT	35 kg	40 kg
HEIGHT	36 cm	40 cm
LENGTH	60 cm	60 cm
WIDTH	22 cm	22 cm

ELECTRIC CHARACTERISTICS

	HG 7000	HG 10000
POWER TRIPHASE	7 KVA	10 KVA
POWER SINGLE PHASE	3 KVA	4 KVA
VOLTAGE	400/230 Vac	
FREQUENCY	50 Hz	
CIRCUIT PROTECTION	RCBO thermic	
PROTECTION	210 Bar	

NOTE: DOA produces also generators with higher power or different electric characteristics of voltage /frequency. For special configuration contact DOA.

HYDRAULIC CHARACTERISTICS

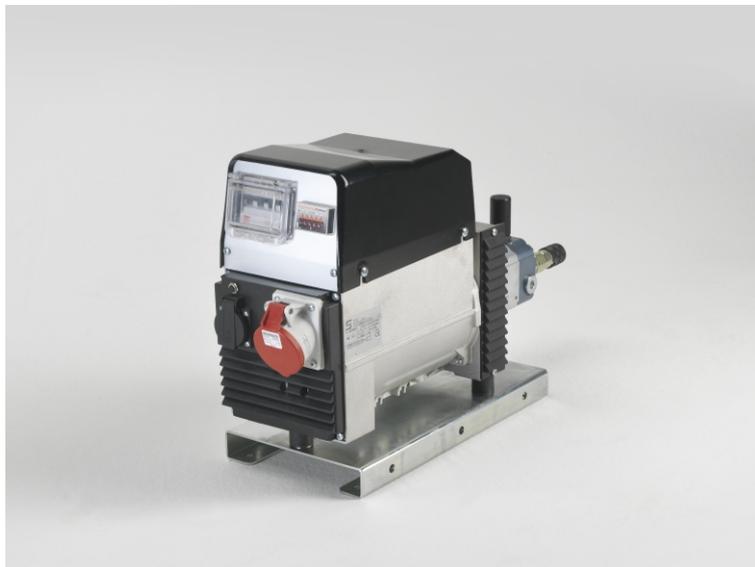
	HG 7000	HG 10000
FLOW MIN-MAX	38 - 42 L/min	40 - 42 L/min
IDEAL FLOW	38 L/min	42 L/min
PRESSURE	210 Bar	210 Bar
BACKPRESSURE	max 17 bar	
FLOW REGULATION ON MOTOR	NOT ON ALL UNITS	



Detail of the hydraulic motor with integrated control valves

In case the flow available from machine is not sufficient to power generators at maximum electric output, the flow regulation on motor is not necessary. This technical details will be discussed at the order. DOA reserves the right to change characteristics and improve tools in any moment without previous notice.

ELECTRIC GENERATORS WITH HYDRAULIC MOTOR



HG 7000 - HG 10000 are compact hydraulic generators with power respectively of :
HG7000 / 7 KVA in tri phase and 3 KVA single
HG10000 / 10 KVA in tri phase and 4 KVA single
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WEIGHT AND DIMENSIONS

	HG 7000	HG 10000
WEIGHT	35 kg	40 kg
HEIGHT	36 cm	40 cm
LENGTH	60 cm	60 cm
WIDTH	22 cm	22 cm

HYDRAULIC CHARACTERISTICS

	HG 7000	HG 10000
FLOW MIN-MAX	38 - 42 L/min	40 - 42 L/min
IDEAL FLOW	38 L/min	42 L/min
PRESSURE	210 Bar	210 Bar
BACKPRESSURE	max 17 bar	
FLOW REGULATION ON MOTOR	NOT ON ALL UNITS	

ELECTRIC CHARACTERISTICS

	HG 7000	HG 10000
POWER TRIPHASE	7 KVA	10 KVA
POWER SINGLE PHASE	3 KVA	4 KVA
VOLTAGE	400/230 Vac	
FREQUENCY	50 Hz	
CIRCUIT PROTECTION	RCBO thermic	
PROTECTION	210 Bar	



Detail of the hydraulic motor with integrated control valves

In case the flow available from machine is not sufficient to power generators at maximum electric output, the flow regulation on motor is not necessary. This technical details will be discussed at the order. DOA reserves the right to change characteristics and improve tools in any moment without previous notice.

NOTE: DOA produces also generators with higher power or different electric characteristics of voltage /frequency. For special configuration contact DOA.

DC WELDERS WITH HYDRAULIC MOTOR



HW series are professional DC welders with capacity of 170 - 200 Ampere powered by hydraulic gear motor. The tools can be connected to the circuits of earth moving equipment, trucks, cranes, mobile workshops and all machines with sufficient hydraulic capacity. The hydraulic functioning gives many advantages: quietness, safety, versatility, compactness, robustness, absence of vibrations and exhaust smokes, minimal maintenance necessity. The welders can also be used as generators for powering electric tools, illumination, etc. HW welders increase the versatility of machines improving the efficiency of the crews and their productivity. The use is ideal as accessories of trucks, utilities vehicles, towing vehicles, drilling equipment and in the majority of outdoor welding works.

ADVANTAGES

- EXTREMELY QUIET - LOW MAINTENANCE NEEDS
- INSTALLATION ON SHOCK MOUNTS - HIGH QUALITY COMPONENTS
- GEAR MOTOR PROTECTED BY HYDRAULIC VALVE AGAINST EXCESS OF FLOW / SPEED - SUDDEN ARREST OF ROTATION - REVERSED ROTATION

WEIGHT AND DIMENSIONS

	HW 170	HW 200
WEIGHT	35 KG	44 KG
HEIGHT	40 cm	
LENGTH	64 cm	
WIDTH	22 cm	

HYDRAULIC CHARACTERISTICS *

	HW 170	HW 200
MIN NECESSARY FLOW l/min	34	38
MAX / IDEAL FLOW l/min	38	42
PRESSURE max	210 Bar	
TOLERABLE BACK PRESSURE	17 bar	

ELECTRIC CHARACTERISTICS

WELDER SPECIFICATIONS

	HW 170	HW 200
WELDING CURRENT max	170 A	200 A
WELDER TYPE	DC - SYNCHRONOUS	
DUTY	max 60 %	
WELDABLE ELECTRODES	ALL TYPES INCLUDING BASIC AND CELLULOSICS	

GENERATOR SPECIFICATIONS

	HW 170	HW 200
POWER	3 KWA	4 KWA
ALTERNATOR TYPE	SINGLE PHASE	
TENSION	115 - 230 VOLT	
FREQUENCY	50 HZ	
CLASS OF INSULATION (PROTECTION)	F/H (IP 21)	

SUPPLIED WITH AUTORESETTABLE THERMAL BREAKER AGAINST OVER LOAD

* NOTE - Welders with different power or hydraulic characteristics are also available - For special applications contact DOA. March 2008

WELDER AND GENERATOR THREE / SINGLE PHASE WITH HYDRAULIC MOTOR



HW 220 is a professional DC welder with capacity of 220 Ampere powered by hydraulic motor, it can also be used as generator three / single phase. The tool can be powered by the circuits of sky lifts, excavators, trucks, mobile service vans and all machines with sufficient hydraulic capacity. The hydraulic functioning gives many advantages: quietness, safety, versatility, easy transportability, robustness, absence of vibrations and exhaust smokes, minimal maintenance necessity. HW 220 increase the versatility of the machines, its use is ideal when is needed to obtain current and to weld anywhere at low cost.

ADVANTAGES

- COMPACT AND EASY TO INSTALL AND TO MOVE
- EXTREMELY QUIET - LOW MAINTENANCE NEEDS
- INSTALLATION ON SHOCK MOUNTS - HIGH QUALITY COMPONENTS
- EXCLUSIVE GEAR MOTOR PROTECTED BY HYDRAULIC VALVE AGAINST EXCESS OF FLOW / SPEED - SUDDEN BLOCK OF ROTATION - REVERSED ROTATION
- VOLTMETER ALLOW TO VISUALIZE CORRECT SETTING AND SPEED

WEIGHT AND DIMENSIONS

WEIGHT	45 KG
HEIGHT	44 cm
LENGTH	68 cm
WIDTH	33 cm

HYDRAULIC CHARACTERISTICS*

NEEDED HYDRAULIC POWER

35 L/min @ 180 BAR	OR	45 L/min @ 140 BAR
MAX FLOW TO TOOL		50 L/min
PRESSURE max		210 bar
TOLERABLE BACK PRESSURE		17 bar

ELECTRIC CHARACTERISTICS

WELDER SPECIFICATIONS

WELDING CURRENT max	220 Amp
WELDER TYPE	DC - SYNCHRONOUS
DUTY	max 60 %
WELDABLE ELECTRODES	ALL TYPES INCLUDING BASIC AND CELLULOSICS

GENERATOR SPECIFICATIONS

	Tri phase Single phase
POWER	6,5 KVA - 3,5 KVA
SOCKET	CEE TYPE
TENSION	400 - 230 VOLT
FREQUENCY	50 HZ
CLASS OF INSULATION (PROTECTION)	F/H (IP 21)

SUPPLIED WITH AUTORESETTABLE THERMAL BREAKER AGAINST OVER LOAD

* NOTE - Welders with different power or hydraulic characteristics are also available - For special applications contact DOA.

WELDER AND GENERATOR THREE / SINGLE PHASE WITH HYDRAULIC MOTOR



HW 300 is a professional DC welder with capacity of 300 Ampere powered by hydraulic motor, machine can also be used as generator with three single phase.

HW300 gives low cost welding capacity and electricity obtained from the hydraulic circuits of excavators, trucks, mobile work shops, service vehicles and all machines with sufficient hydraulic capacity.

The welding current can be fine regulated to give the precise capacity needed in professional welding works.

Hydraulic functioning means : quietness, safety, reduced weight and space, no need of extra fuels , easy transportability, robustness, absence of vibrations and exhaust smokes, minimal maintenance necessity.

HW 300 increases the versatility of the machines and eliminate all problems associated with traditional engine powered welders.

ADVANTAGES

- TOOL IS DELIVERED INSTALLED ON A STEEL SUPPORT FIXED BY SHOCK MOUNTS -
- HIGH QUALITY COMPONENTS
- EXCLUSIVE GEAR MOTOR PROTECTED BY HYDRAULIC VALVE AGAINST EXCESS OF FLOW / SPEED - SUDDEN BLOCK OF ROTATION - REVERSED ROTATION
- VOLTMETER ALLOW TO VISUALIZE CORRECT SETTING AND SPEED
- WELDING CURRENT CAN BE FINE ADJUSTED TOHAVE IDEAL WELDING PARAMETERS

WEIGHT AND DIMENSIONS

WEIGHT	90 KG
HEIGHT	44 cm
LENGTH	68 cm
WIDTH	33 cm

HYDRAULIC CHARACTERISTICS*

MINIMUM NEEDED HYDRAULIC POWER	45 L/min @ 180 BAR
MAX FLOW TO TOOL	55 L/min
PRESSURE max	210 bar
TOLERABLE BACK PRESSURE	17 bar

ELECTRIC CHARACTERISTICS

WELDER SPECIFICATIONS

WELDING CURRENT max	300 Amp
WELDER TYPE	DC - SYNCHRONOUS
DUTY	max 60 %
WELDABLE ELECTRODES	ALL TYPES INCLUDING BASIC AND CELLULOSICS

GENERATOR SPECIFICATIONS

	Tri phase Single phase
POWER	8,4 KVA - 4,5 KVA
SOCKET	CE TYPE
TENSION	400 - 230 VOLT
FREQUENCY	50 HZ
CLASS OF INSULATION (PROTECTION)	F/H (IP 21)

SUPPLIED WITH AUTORESETTABLE THERMAL BREAKER AGAINST OVER LOAD

* **NOTE** - Welders with different power or hydraulic characteristics are also available