GW6090



TECHNICAL DATA SHEET



GW6090 TECHNICAL FEATURES	
Electronic control	3 microprocessors +1 (optional communication card)
Standard programs stored	20
Settable programs	10 (expandable to 50)
Backlit graphic LCD display	128 x 64 pixels
Clock and calendar	yes
Reprogrammable phases	10
Phase parameters	type of water, detergent quantity, target temperature, extension time in minutes, drying temperature and time
Tank internal temperature	5°C to 95° C
Accuracy	0.1°C
Temperature sensors in tank	1 PT 1000 CLASS B IEC 60751
Time display	5 digits
Feed pumps (50 ml/min)	4
Detergent level sensor	optional
Safety lock	yes, with electromagnetic release
Safety devices	safety thermostats, door interlock
Alarm display	80
Troubleshooting menu	yes
Program editing	yes (via password)
Password	4 levels
Languages	4: Italian, English, French, German (on request: Spanish, Polish, Swedish, Russian, Japanese)
AUXILIARY FUNCTIONS	
External sensor duct	optional
Waste water separation solenoid valve control	yes
RS232 serial port for PC connection	yes
RS232 serial port for printer	yes
USB serial port	optional
LAN connection	optional
Water quality check	optional
Cycle storage	yes
Cycle file download	yes
DRYING SYSTEM	
Drying fan	0.8 kW
Drying heating element	4 kW
Prefilter class C 98%	yes
HEPA filter Class S 99.999%	yes
Drying air temperature	75°C-100°C
WATER SUPPLY (PRESSURE 1.5-5 BAR)	
Cold/hot water hardness	max 42° F
Demineralised water conductivity	<20µS/cm
Demineralised water pump	optional
Water softener incorporated	no
Recirculation pump	2 pumps of 400 l/min
WATER HEATING	
Electrical	18.5 kW max
Steam	optional (GW6090DSV version)
Water pre-heating via boiler	optional
DIMENSIONS LxDxH mm	
Outside	2035x801x902 (GW6090DS and GW6090DSV versions) and 1835x801x902 (GW6090 version)
Inside	670x650x835
Net weight (kg)	282
STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	3/N/PE 400V ~ 50Hz 18.5 kW
NOISE	50 dB
CONFORMITY	2006/95/EEC, 93/68/EEC, 2004/108/EEC EN61010-1, EN61010-2-040, EN61326:1997+A1:1998
AVAILABLE VERSIONS	GW6090, GW6090DS, GW6090DSV







TECHNICAL FEATURES

INSTRUMENT WASHER DATA

VERSIONS *	**GW6090**	
Appliance installation class (CEI 62.5)	II	
Casing protection (IP)	34	
Stabilised power supply	±10%	
Ambient temperature	35	
max. height (personalisation)	1000 m	
humidity	50% max	
pressure	atmospheric	
internal dimensions [mm]	988x690x674	460 litres
dimensions of wash tops [mm]	620x620	
external dimensions [mm] LxHxD	900x2020x800	
external dimensions with packaging	990x2015x990	
external dimensions of built-in version	1.2 mm	
thickness of chamber protection	840	
height of loading level from floor	1780	
overall dimensions of machine when open	980 mm, 90°	
dimensions of door and angle of aperture	thermo-acoustic	
chamber lagging	AISI 316L	
chamber steel type	AISI 304	
door steel type	AISI 304	
casing steel type	50dB	
noise	yes	
CE mark	73/23, 93/68, 2004/108	
European directives (EEC)	harmonised applicable	
standards	no	
IMQ quality mark	295 (net)	335 (gross)
weight GW3060 [Kg]	peristaltic pumps	
type of detergent dispensers	5	
number and use of dispensers	norprene, viton	
type of peristaltic pump hoses	yes	
detergent unit	5	
n° of 2 litre container stations		
recirculation pump	2x400 litres	2x550W
drain pumps	18 l/min	80W
description of hydraulic system	water recirculation	
description of drying system	forced air	
trolley connection system	spring	

DRYING

	GW4090 (forced air)		
filters	prefilter class C 98%	HEPA filter class S 99.999%	duration: 800 cycles
motor type	brushes		
air change index [m3/h]	2x100 m3/h		
activation system	software		
settable operating time settable	0-1h		
settable temperature interval	60-110		
safety device	yes		

CONSUMPTION

	GW4090
Electrical	kW
total average power draw	7
average drying fan draw	100 W
heating assembly power draw	2 kW
total drying power draw	2.1 kW
water heater power draw	6
power draw for each cycle	depends on cycle
washing pump power draw	390 W
peristaltic pump power draw	10W

	GW6090				
Detergents	detergent	neutraliser	disinfectant	lubricant [ml]	neutral detergent [ml]
[ml] [ml] [ml]					
consumption per dose	200	120	400	8	240

DETERGENTDISPENSING SYSTEM STANDARD FITTINGS	**GW6090**
Powder dispenser	Not present
Pump P1 alkaline detergent	1
Pump P2 acid neutraliser	1
Pump P3 NaOH or auxiliary additive	1
Pump P4 defoamer or auxiliary additive	1

* Unless specified, the characteristics are present on all versions

TECHNICAL FEATURES

ELECTRONIC VERSIONS *

	GW6090			
Board type	microprocessor			
memory	cycle registration			
n° programmes	20			
n° freely settable programmes	10			
n° phases per programme	max. 10			
settable values	time time for washing and drying	temperature objective for washing and drying	quantity and type of detergent	languages
display	LCD backlit, 128x64 pixels			
display indications	execution parameters			
control panel	diaphragm keyboard			
functions	controls, setting and diagnostics			

DATA COMMUNICATION

	GW6090
printer	serial
position	front
data printing	execution parameters
RS232 port	yes
USB port	yes
LAN port	optional
software	wdtrace, wdtrace light
acoustic signals	yes can be disabled
data download	
software upgrade	yes

WATER SOFTENER

	GW6090
description	
type of salt to use	
max. temp. of supply water	
resin type	
number of regenerations allowed per cycle	
hardness reduction capacity	

CONDENSER

	GW6090
type	
start-up temperature	
feed system	
drain system	

CONTROLS / SAFETY DEVICES

	GW6090
door lock	yes
dual temperature sensor	yes
probe duct	optional
password	yes
alarms/warnings/diagnostics	yes
detergent dispensing controls	yes
water supply controls	yes
stopping moving parts	yes

TIMES

	GW6090	
washing for each phase	according to programme	see table programme
drying	according to programme	see table programme
for each cycle	according to programme	see table programme

* Unless specified, the characteristics are present on all versions

GW6090 PROGRAMME TABLE

PROGRAMME N.	PROGRAMME NAME	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	WASHING TIME MIN.	DRYING	AF TOT [l]	AC TOT [l]	AD TOT [l]	KW/H TOT
Programme 1	**PREWASH**	prewashing							description				
	duration [m]	10						10	/				
	qty detergent [ml]	0							/				
	power consumption [kW/h]	0,25							/				
	water type AC/AF/AD	AF							/				
	temperature [°C]	T.amb											
	hold time [m]	5											
Programme 2	**PLASTIC WASH**	washing	neutralisation	rinse	rinse demi	rinse in demin.water 60°C			drying				
	duration [m]	18	7	6	6	15		52	0				
	qty detergent [ml]	50	30	0	0	0							
	power consumption [kW/h]	3,9	0,1	0,05	0,05	3							7,10
	water type AC/AF/AD	AF	AC	AC	AD	AD				40	80	80	
	temperature [°C]	60	T.amb	T.amb	T.amb	60			0				
	hold time [m]	4	2	1	1	1							
Programme 3	**QUICK WASH**	washing	neutralisation	rinse	rinse in demin.water75°C				drying				
	duration [m]	17	7	8	17			49	30				
	qty detergent [ml]	50	30	0	0								
	power consumption [kW/h]	3,80	0,1	0,15	3,80				1				8,85
	water type AC/AF/AD	AC	AC	AF	AD					40	80	40	
	temperature [°C]	75	T.amb	T.amb	75				100				
	hold time [m]	1	2	3	1								
Programme 4	**MEDIUM WASH**	washing	neutralisation	rinse	rinse in demin.water75°C				drying				
	duration [m]	21	7	8	17			53	30				
	qty detergent [ml]	50	30	0	0								
	power consumption [kW/h]	5,00	0,1	0,15	3,80				1				10,05
	water type AC/AF/AD	AC	AC	AF	AD					40	80	40	
	temperature [°C]	75	T.amb	T.amb	75				100				
	hold time [m]	5	2	3	1								
Programme 5	**STANDARD WASH**	washing	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C			drying				
	duration [m]	22	7	8	6	17		60	30				
	qty detergent [ml]	50	30	0	0	0							
	power consumption [kW/h]	5,30	0,1	0,15	0,05	3,80			1				10,40
	water type AC/AF/AD	AC	AC	AF	AD	AD				40	80	80	
	temperature [°C]	80	T.amb	T.amb	T.amb	75			100				
	hold time [m]	5	2	3	1	1							
Programme 6	**INTENSIVE WASH**	washing	washing	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	8	22	7	6	7	17	67	30				
	qty detergent [ml]	50	50	40	0	0	0						
	power consumption [kW/h]	0,15	5,3	0,1	0,05	0,1	3,80		1				10,50
	water type AC/AF/AD	AC	AC	AC	AC	AD	AD				160	80	
	temperature [°C]	T.amb	90	T.amb	T.amb	T.amb	75		100				
	hold time [m]	3	3	2	1	2	1						
Programma 7	**INTENSIVE WASH BLOOD-STAINED GLASSWARE**	washing	washing	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	8	23	8	6	7	17	69	30				
	qty detergent [ml]	50	50	30	0	0	0						
	power consumption [kW/h]	0,15	5,4	0,15	0,05	0,1	3,80		1				10,65
	water type AC/AF/AD	AF	AF	AF	AF	AD	AD			160		80	
	temperature [°C]	T.amb	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	3	3	3	1	2	1						
Programme 8	**WASH AGAR STAINED GLASSWARE**	washing	washing	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	8	23	8	6	7	17	69	30				
	qty detergent [ml]	50	50	30	0	0	0						
	power consumption [kW/h]	0,15	5,4	0,15	0,05	0,1	3,80		1				10,65
	water type AC/AF/AD	AF	AC	AC	AC	AD	AD			40	120	80	
	temperature [°C]	T.amb	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	3	3	3	1	2	1						
Programme 9	**INTENSIVE WASH AGAR STAINED GLASSWARE**	washing	washing	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	20	25	7	6	7	17	82	30				
	qty detergent [ml]	50 + 100	50 + 100	30	0	0	0						
	power consumption [kW/h]	4,7	6	0,1	0,05	0,1	3,80		1				15,75
	water type AC/AF/AD	AF	AC	AC	AC	AD	AD			40	120	80	
	temperature [°C]	80	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	3	5	2	1	2	1						
Programme 10	**THERMAL DISINFECTION 93°C 3'** thermal disinfection	neutralisation	rinse in demin. water	rinse in demin. water at 75°C					drying				
	duration [m]	23	7	7	17			54	30				
	qty detergent [ml]	50	30	0	0								
	power consumption [kW/h]	5,4	0,1	0,1	3,80				1				10,40
	water type AC/AF/AD	AC	AC	AD	AD						80	80	
	temperature [°C]	93	T.amb	T.amb	75				100				
	hold time [m]	3	2	2	1								
Programme 11	**THERMAL DISINFECTION 93°C 10'** thermal disinfection	neutralisation	rinse in demin. water	rinse in demin. water at 75°C					drying				
	duration [m]	30	7	7	17			61	30				
	qty detergent [ml]	50	30	0	0								
	power consumption [kW/h]	7,5	0,1	0,1	3,80				1				12,50
	water type AC/AF/AD	AC	AC	AD	AD						80	80	
	temperature [°C]	93	T.amb	T.amb	75				100				
	hold time [m]	10	2	2	1								

GW6090 PROGRAMME TABLE

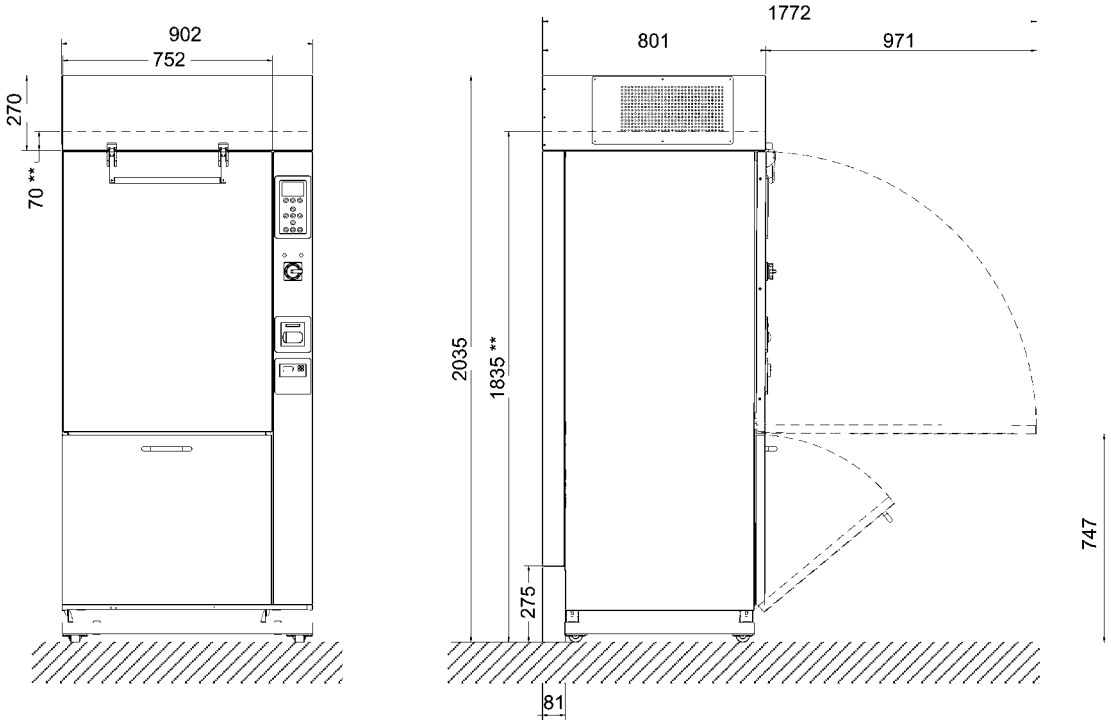
PROGRAMME N.	PROGRAMME NAME	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	WASHING TIME MIN.	DRYING	AF TOT [l]	AC TOT [l]	AD TOT [l]	KW/H TOT
Programme 12	**INTENSIVE THERMAL DISINFECTION 93°C 3'**	prewashing	termodisinfezione	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	7	25	7	7	6	17	69	30				
	qty detergent [ml]	30	50	30	0	0	0						
	power consumption [kW/h]	0,1	6	0,1	0,1	0,05	3,80		1				11,15
	water type AC/AF/AD	AF	AF	AC	AC	AD	AD			80	80	80	
	temperature [°C]	T.amb	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	2	5	2	2	1	1						
Programme 13	**INTENSIVE THERMAL DISINFECTION 93°C 10'**	prewashing	termodisinfezione	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	7	30	7	7	6	17	74	30				
	qty detergent [ml]	30	50	30	0	0	0						
	power consumption [kW/h]	0,1	7,5	0,1	0,1	0,05	3,80		1				12,65
	water type AC/AF/AD	AF	AF	AC	AC	AD	AD			80	80	80	
	temperature [°C]	T.amb	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	2	10	2	2	1	1						
Programme 14	**WASH PETROL-STAINED GLASSWARE**	prewashing	washing	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	7	21	7	7	6	17	65	30				
	qty detergent [ml]	0	50 + 100	30	0	0	0						
	power consumption [kW/h]	0,1	4,8	0,1	0,1	0,05	3,80		1				9,95
	water type AC/AF/AD	AC	AC	AC	AC	AD	AD				160	80	
	temperature [°C]	T.amb	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	2	1	2	2	1	1						
Programme 15	**INTENSIVE WASH PETROL-STAINED GLASSWARE**	prewashing	washing	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	7	25	7	7	6	17	99	30				
	qty detergent [ml]	30	50 + 100	30	0	0	0						
	power consumption [kW/h]	0,1	6	0,1	0,1	0,05	3,80		1				11,15
	water type AC/AF/AD	AC	AC	AC	AC	AD	AD				160	80	
	temperature [°C]	T.amb	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	2	5	2	2	1	1						
Programme 16	**WASH OIL-STAINED GLASSWARE**	prewashing	washing	neutralisation	rinse	rinse in demin.water	rinse in demin.water75°C		drying				
	duration [m]	7	21	7	7	6	17	65	30				
	qty detergent [ml]	50 + 100	50 + 100	30	0	0	0						
	power consumption [kW/h]	0,1	4,8	0,1	0,1	0,05	3,80		1				9,95
	water type AC/AF/AD	AC	AC	AC	AC	AD	AD				160	80	
	temperature [°C]	50	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	2	1	2	2	1	1						
Programme 17	**INTENSIVE WASH OIL-STAINED GLASSWARE**	prewashing	washing	neutralisation	rinse	rinse demi	rinse in demin.water75°C		drying				
	duration [m]	17	30	7	7	6	17	84	30				
	qty detergent [ml]	50 + 100	50 + 100	30	0	0	0						
	power consumption [kW/h]	3,8	7,5	0,1	0,1	0,05	3,80		0,6				15,95
	water type AC/AF/AD	AC	AC	AC	AC	AD	AD				160	80	
	temperature [°C]	75	93	T.amb	T.amb	T.amb	75		80				
	hold time [m]	1	10	2	2	1	1						
Programme 18	**WASH PETROL-STAINED GLASSWARE**	washing	neutralisation	rinse	rinse demi	rinse in demin.water75°C			drying				
	duration [m]	25	7	6	7	17		62	30				
	qty detergent [ml]	50 + 100	30	0	0	0							
	power consumption [kW/h]	6	0,1	0,05	0,1	3,80			1				11,05
	water type AC/AF/AD	AC	AC	AC	AD	AD					120	80	
	temperature [°C]	93	T.amb	T.amb	T.amb	75			100				
	hold time [m]	5	2	1	2	1							
Programme 19	**WASH DIESEL-STAINED GLASSWARE**	prewashing	washing	neutralisation	rinse	rinse demi	rinse in demin.water75°C		drying				
	duration [m]	8	21	7	6	7	17	66	30				
	qty detergent [ml]	0	50	30	0	0	0						
	power consumption [kW/h]	0,15	4,8	0,1	0,05	0,1	3,80		1				10,00
	water type AC/AF/AD	AC	AC	AC	AC	AD	AD				160	80	
	temperature [°C]	T.amb	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	3	1	2	1	2	1						
Programme 20	**INTENSIVE WASH**	washing	washing	neutralisation	rinse	rinse demi	rinse in demin.water75°C		drying				
	duration [m]	30	30	7	7	6	17	97	30				
	qty detergent [ml]	50 + 100	50 + 100	40	0	0	0						
	power consumption [kW/h]	7,5	7,5	0,1	0,1	0,05	3,80		1				20,05
	water type AC/AF/AD	AC	AC	AC	AC	AD	AD				160	80	
	temperature [°C]	93	93	T.amb	T.amb	T.amb	75		100				
	hold time [m]	10	10	2	2	1	1						

AF = Cold water; **AC** = Hot water; **AD** = Demineralised water.

N.B.

The use of hot water in the washing and thermal disinfection phases with temperatures higher than 40°C reduces total cycle times by approximately 50%. Washing and thermal disinfection times are calculated according to an average supply water temperature of 10°C. Power consumption was calculated for three-phase machines.

GW6090 INSTALLATION DIAGRAM



** Height of GW6090 model (without drying).

INSTALLATION INFORMATION

WATER CONNECTIONS

Supply	Model	pressure [bar]	flow rate [l/min]	temp [°C]	length] hose [mm]	hose type	connectors	hardness max.	conductivity max. [µS]	system filtration	position
Cold water	GW6090	2-5	8	max. 40	1900	flexible	G 3/4”	10 F°	<1000	recommended	rear
Hot water	GW6090	2-5	8	max. 70	1900	flexible	G 3/4”	10 F°	<1000	recommended	rear
Demineralised water	GW6090	2-5	8	max. 70	1900	flexible	G 3/4”	5 F°	30	recommended	rear
Cold water condenser	GW6090	no									
	GW6090	PAD2 pression max 1 bar	storage tank of 100 l with connection 3/4’ at the bottom	positioned at a 40cm height over machine							

Drains	Model [l/min]	flow rate capacity	temperature	hose hose [mm]	hose type	hose connectors length	head [mm]	height min. [mm] against wall,	position on floor, under sink
Machine drain	GW6090	18	95°C max	1800	corrugated flexible	Ø int 20	1400	1000	not under sink
Condenser drain	GW6090	-							
VDS dual drain	GW6090	optional							

ELECTRICAL CONNECTIONS

Supply	Model	frequency [HZ]	voltage [V]	cable type	plug [mm]	cable length
single-phase 1/N/PE	GW6090	-	-	-	-	-
three-phase 3/N/PE	GW6090	50	400	5x6mm² 450/750V	to panel	2000
fuses/protection	GW6090		250	5x20mm		
user preparation	GW6090	standard				