Specification of screen symbols

Symbol	Description	Symbol	Description
Open door		Internal softener: lack of salt, refill salt container (max. 1,5kg) TE / VE: countdown device P511 is expired, check ext. water treatm.	
Ideas & tricks			
Operat. Instruct.			
Address Service+Chem.			
ECO	Energy saving mode: time increased (150%), temp. boiler (94%), chemicals (65%), mechanical action (93%)		EZEO: Energy optimization device: after signal on E14 the machine is switched over to the energy saving mode (P575)
	Silence mode: mechanical action reduced (75%), time increased (250%)		Bottom wash field blocked (Err 29)
	Short program: time of program will be reduced (50%), temperature boiler (75%), in case of glasses boiler temperature remains 65°C		Top wash field blocked (Err 28)
F1	Special mode F1: the selected program will be altered percentage by the parameters of F1 (see special programs)		Deeply soiled tank strainer (Err 25)
	Intensive mode: time is increased by 150% of the selected program. Activation of intensive mode by double click of wash button		Foam detection in tank (Err 37): mechanical action is reduced (90%) and time extended (125%)
	Ventilation of internal detergent dispenser (Fluidos DT) Only possible with min. water level in the tank!		Ventilation of internal rinse aid dispenser (Fluidos DB)
	Menu driven descaling program		Menu driven basic program
	Regeneration liquid DeMatik exhausted or max. amount of regeneration intervals expired, refill 1.5 kg of regeneration liquid and scan chip		DeMatik: problem with chip data, see Err43, Err44 and Err45

Error management

Error management, the reaction of the control to an error can be set by the parameter P9xx: 0 = error off / 1 = error display in the data logger / 2 = error display in the data logger and on screen /3 = error display in the data logger, on screen and as acoustic signal / 4 = error display in the data logger, on screen and as permanent acoustic signal
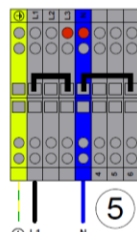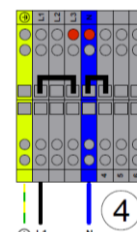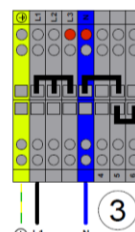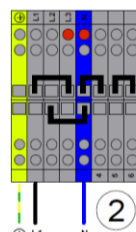
Failure	Para.	Reason of failure / detection	Reaction of the machine
Err1	P902	Level sensor tank: check cable and plug / hose untight / sensor defective / air chamber blocked	Tank is drained, machine is switched off
Err2	P903	Temperature sensor tank: short circuit / cable failure / plug failure, not connected properly	Tank heater is switched off
Err3	P904	Temperature sensor boiler: short circuit / cable failure / plug failure, not connected properly	Boiler heater is switched off
Err4	P905	Wash pump is not working or level sensor tank failure: tank level is not dropping within 30sec	Frequency inverter is switched off
Err5	P906	Final rinse pump defective or level sensor boiler failure or rinse jets blocked: within 30sec after activation of rinse pump boiler need to be empty.	Rinse pump is switched off
Err6	P907	Drain pump is not working: tank level is not dropping within 3min	Machine is switched off
Err7	P908	Boiler heating or contactor defective: within 10min boiler temperature is not rising	Machine is operating with cold boiler water
Err8	P909	Tank heating element or relay A07 / A08 defective: within 15min tank temperature is not rising	Tank heating is switched off
Err9	P910	Drain pump is not working: self-cleaning program cannot be finished.	Machine is switched off
Err10	P911	with internal softener: lack of salt, with TE/VE: countdown device exhausted, with Dematik: lack of regeneration liquid DeMatik Pi-240 Reg	Dematik: a part of the water in the DeMatik container is drained, Err 42 is indicated
Err11	P912	Temperature of frequency inverter higher than standard (>97°C)	Power of wash pump is reduced (10%)
Err11.1	P913	Temperature of frequency inverter too high	
Err11.2	P914	Sensor of temperature for frequency inverter defective (internal test)	
Err12	P915	Bus cable Master – Slave defective	All actuators are switched off
Err12.1	P916	Bus cable Master – frequency inverter defective	Frequency inverter is switched off
Err13	P917	Filling time of tank exceeded: water inlet closed / filter of water inlet or solenoid valve blocked / solenoid v. or rinse pump defective / machine not water tight / boiler heating defective	
Err14	P918	Filling time boiler exceeded: water inlet closed / filters of water inlet or solenoid valve blocked or defect.	Boiler filling time max.: 255sec
Err15	P919	Level sensor boiler defective: water level in tank is rising although boiler should be empty	
Err16	P920	Rinse aid container empty: there's a signal on E9 for more than 2min	Rinse aid dosing is blocked after 20 more cycles
Err17	P921	Detergent container empty: there's a signal on E11 for more than 2min	Detergent dosing is blocked after 20 more cycles
Err18	P922	No parameter set P000 stored	Machine is blocked
Err18.1	P923	Dysfunction of door end switch: door needs to be opened at least once a time within 20 wash cycles	Boiler heating is switched off
Err18.2	P924	No phase on "door" input of frequency inverter: 4sec after closing the door there should be a phase	
Err18.3	P925	No phase on L1 input of frequency inverter: while machine is switched on there should be a phase	Internal test
Err19	P926	Detection of 1N~ or 3N~ (Machines with trafo, 440V without N, please check: P926=0)	In case of wrong connection machine is blocked
Err20	P927	Energy optimization: active in case of phase on E14	
Err21	P928	Open door during the start of a program or while a wash cycle is in progress	
Err22	P929	Service interval expired: preset operating hours in P822 expired	P823=0 (function "service interval" off)
Err23	P930	Mains voltage failure	
Err24	P931	Tank level is more than 30sec too high (from Version V.08 time is increased to 45sec)	Rinse pump + solenoid valve off / drain pump on
Err25	P932	Tank strainer blocked / heavily soiled: tank level during the cycle too low, all actuators are switched off	Error is shown as long as door is opened
Err26	P933	Tank level is increasing although machine is switched off	Drain pump switched on
Err27	P934	Water flow meter of WSD is detecting water although solenoid valve is closed (only with int. softener)	Drain pump switched on
Err28	P935	Top wash field blocked	Below 3 turns after 30sec of washing time
Err29	P936	Bottom wash field blocked	Below 3 turns after 30sec of washing time
Err30	P937	Clouding sensor is detecting middle to heavy cloudiness of tank water	Quantity of final rinse is increased
Err31	P938	wrong installation of bottom wash field	Water level of boiler is increasing during washing
Err32	P939	No water inlet / only with water flow meter (internal softener)	
Err33	P940	Descaling warning: interval to descale the machine (P597) is expired	
Err34	P941	Tank not water tight: tank level is dropping within 30min about 20 mm although no actuator activation	
Err35	P942	Base frame leaking (only machines with plastic frame, since September 2012). In case of no sensor, check humidity on the plug in the base frame	
Err37	P944	Foam detection in tank, time of wash cycle increased, pump power reduced	
Err38	P945	Clouding sensor: short circuit / cable failure / plug failure, not connected properly	
Err39	P946	Crash of parameters: E03 und E06 entered incorrectly	
Err40	P947	Level sensor boiler: check, plug and hose / wash field not connected properly or o-ring on axis not insert / overflow from Airgap into boiler too high / top or bottom wash manifold not tight	Machine is switched off. Faulty pressure in boiler or level switch defective
Err41		Communication with DeMatik scanner defective	Change scanner
Err42	P961	Regeneration liquid DeMatik Pi-240 Reg exhausted, float switch detects „empty", or max. amount of regeneration intervals expired, internal calculation	refill 1.5 kg of regeneration liquid and scan chip
Err43		Data on chip cannot be scanned: no Winterhalter chip or defective data on chip	Scan again with a new chip. In case the failure is still indicated change scanner
Err44		Old chip, the chip was used already	
Err45		Chip cannot be scanned: no Winterhalter Chip, defective chip, scanner defective	
Err47		Wrong amount of regeneration intervals. Too little or too much regeneration liquid refilled, internal calculation	refill 1.5 kg of regeneration liquid and scan chip

Sys01-BUS ERR / Sys02-Com Fc Module Error | Main power connection to FC (frequency converter) is missing, wrong connected or bus cable defective

Connecting diagram for Europe (except Belgium with 230V/3/PE)

U			Pmax	⏻	P555
380 V - 415 V	3N~	PE	7,9 kW	16 A	0	①
380 V - 415 V	3N~	PE	6,0 kW	10 A	1	①
220 V - 240 V	N~	PE	3,2 kW	16 A	1	②
220 V - 240 V	N~	PE	4,2 kW	20 A	1	③
220 V - 240 V	N~	PE	2,6 kW	13 A	1	④
220 V - 230 V	N~	PE	1,8 kW	10 A	2	⑤

● connection tank heater relais
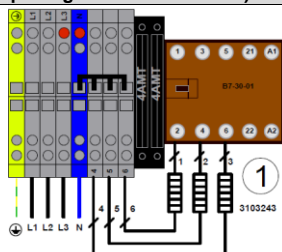
P000 (Parameter set)	System	UC-M/L/XL	UC-S	P000		System	UC-M/L/XL	UC-S
3(N)~	dish	Standard	1	30	**1N~**	dish	Standard	15	44
	glass	Standard	6	35		glass	Standard	20	49
		effect	7	36			effect	21	50
		Cool	8	37			Cool	22	51
	bistro	Standard	11	40		bistro	Standard	25	54
	cutlery	Standard	13	42		cutlery	Standard	27	56

Parameter of special programs

		wash time (sec)	temp. tank (°C)	detergent (ml/l)	wash power (%)	final rinse (lit)	Temp. boiler (°C)	Rinse aid (ml/l)
⊘F1	F1 for Program 1	P057	P058	P059	P060	P061	P062	P063
	F1 for Program 2	P122	P123	P124	P125	P126	P127	P128
	F1 for Program 3	P187	P188	P189	P190	P191	P192	P193
effect	effect glasses	160sec	45°C	3,0ml/l	---	---	50°C	0,2ml/l
	effect dishes	160sec	55°C	3,0ml/l	---	---	60°C	0,2ml/l
	Switch off ECO program (P807=0) and short program (P811=0)			effect chemicals: F33 effect (glasses) / F8200 effect (dishes) / B250 effect (rinse aid agent)				
Cool	Cool glasses	Temperature tank		Temperature boiler		Tank heating reinforced: 2 x 2,5kW (optional)		
		55°C (Thermostop on tank)		cold (Boiler heating off)		cool chemicals: no special chemicals (e.g. F30 or F420)		

Select parameter set for glasses; choose pictogram of 3D glasses from the picto-library for program 2. Chemicals: detergent: F720 BLUe, rinse aid: B200S

Set the following parameters:	P803=0	P805=0	P806=0	807=0	P808=0	P809=0	P810=0	P811=0	P812=0	P814=3
Settings for Program 2	Wash time	Tank temp.	Detergent	Wash power	Final rinse	Boiler temp.	Rinse aid			
	120 sec	60°C	2,0ml/l	80%	3,4 lit	60°C	0,1ml/l			

Specification of the parameters (red = Hardware parameter can be changed only by manual selection, these parameters will not be changed by a parameter reset)

P308	Calibration of tank temperature: 15 = factory / 16 = + 0,1°C / 14 = - 0,1°C ...	P599	Energy saving mode for standby operation, 0: off / 1: on Tank- and boiler temperature can drop to temperature set in P600 and P601
P309	Calibration of boiler temperature: 15 = factory / 16 = + 0,1°C / 14 = - 0,1°C ...	P600	Energy saving mode for tank temperature
		P601	Energy saving mode for boiler temperature
P315	Boiler heating active while filling, 0: off / 1: on	P604	Clouding sensor 0: off / 1: on
P318	Max. temperature of first tank filling impulse (0-70°C)	P615	control of internal lighting (exhibition) 0: off / 1: on (new code: 0000)
P405	Tripping off time between washing and rinsing in sec.	P620	Test mode „continues cleaning" 1: preselected program is active as infinite loop 2: preselected program will be performed X times (X = P621)
P406	Tripping off time at the end of the program in sec.		
P415	Time (sec) of final rinse after tank draining of self-cleaning program	P621	Amount of program which are performed in the test mode
P416	Time (sec) of drain pump at the end of self-cleaning program	P622	Duration of break between the program of test mode
P419	Time (5sec standard) of drain pump after switching on machine	P625	Scanner DeMatik, 0: off / 1: on (do not change)
P428	Time (sec) of final rinse pump for impulses of first tank filling	P704	Type of detergent pump (A11), 3: Fluidos DT (setting max.) / 2: ESP166(C), SP166Z / 1: Signal parallel to water inlet valve on clamp „Fill" ext. Dosage / 0: Signal during tank filling on clamp „Fill" ext. Dosage
P429	Delay time for fan of energy machines after the final rinse. During this time the wash button is flashing green-blue. (factory setting 120sec)		
P431	Activation time of reg. valve Y5 in sec with int. softener or DeMatik	P709	Type of final rinse pump (A10), 2: Fluidos DB
P435	Time (sec) for fan of energy machines after end of program and closed door	P800	Size of machine (in mm), 0: S (B: 460) / 1: M (B: 600, H: 715) / 2: L (B: 600, H: 810) / 3: XL (B: 600, H: 810, T: 640,5)
P436	Break time (sec) between energy fan intervals in case of closed door	P801	Type of wash process, 0: Standard / 1: Cool / 2: Energy / 3: effect or ReTemp
P446	Carbonate hardness in °gCH, 6-20°gCH (German Carbonate Harness)	P803	Symbol program 1 on screen, 0: off / 1: on
P500	Preselected program after tank filling, 0: P1 / 1: P2 (factory setting) / 2: P3	P804	Symbol program 2 on screen, 0: off / 1: on
P503	Water treatment, 1: countdown device / 2: internal softener / 3: DeMatik	P805	Symbol program 3 on screen, 0: off / 1: on
P504	Internal softener: Rinse water to clean softener resin (10 = 1,0 lit)	P806	Intensive program, 0: off / 1: on (double click on wash button)
P505	Set water hardness in °gTH (German Total Hardness)	P807	Symbol program ECO (energy saving progr.) on screen, 0: off / 1: on
P511	Water quantity for countdown device in m³ (1000lit)	P808	Symbol „silence program" on screen, 0: off / 1: on
P516	Automatic program start by closing the door, 0: off / 1: on	P809	Symbol „Cool program" on screen, 0: off / 1: on
P541	Flashing of wash button after end of program, 0: off / 1: on	P810	Symbol „effect or ReTemp program" on screen, 0: off / 1: on
P543	0: Thermostop (TS) on Tank / 1: TS on boiler / 2: TS on boiler and tank	P811	Symbol „short program" on screen, 0: off / 1: on
P550	Acoustic signal when switching on/off and at the end of cycle, 0: off / 1: on	P812	Symbol „special program F1", 0: off / 1: on
P555	Heating Interlock, 0: off / 1: boiler against tank / 2: wash pump or boiler against tank / 3: wash pump and boiler against tank	P814	Symbol „deaerate dispenser" on screen, 0: on (detergent and rinse aid) / 1: on (only rinse aid) / 2: on (only detergent) / 3: off
P557	How many starts of energy fan intervals after end of program (factory: 2 x)	P817	Symbol „descaling and basic cleaning program" on screen 1: on (only descaling program) / 2: on (only basic cleaning) / 3: on (descaling and basic program) / 0: off
P560	Ready for operation 0: only with target temperatures / 1: no temp. locking		
P574	EZEO 0: off / 1: on with signal on E14 / 2: on without signal on E14		
P575	Reaction of machine with EZEO signal 0: heating elements off / 1: tank heater off / 2: boiler heater off	P822	Count down device for next service in hrs or wash cycles (from V.08 on) CDD off (before V.08): P823 to 0 and P822 between 1000 and 4000
P576	Timer for Signal EZEO in sec (factory: 30sec) to activate function	P823	Counter until „SERVICE" appears on screen (factory: 50 hrs)
P577	Permitted temperature drop for EZEO (factory: 5°C)	P824	Acoustic signal, 0: off / 2: on
P579	Multifunction relay, setting with P580-P584, with DeMatik occupied	P825	Dimmable screen (range: 0 – 150%)
P586	Foam detection, 0: off / 1: on (program will be extended in case of foam)	P827	Screen saver, 0: off / 1: on
P587	Speed regulation of wash pump in case of foam	P828	Time until screen saver appears (0 – 4095sec)
P595	Menu-driven first commissioning, 0: off / 1: on / 2: on (simplified)	P829	Darken screen, 0: off / 1: on
P596	Warning advice to descale machine, 0: off / 1: on	P830	Time until screen darkens (factory: 1200sec)
P597	Count down device in hrs for warning advice to descale the machine	P831	Time until screen switches back to standard display (0 – 4095sec)
		P836	Welcome message in national language, 0: off / 1: on
		P837	Count down device for service, 0: off / 1: display in hrs / 2: display in cycles

Output		Display	Input		Display
A01	Frequency inverter	1: phase on input FI / 0: no phase	E01	Sensor temperature tank	°C (tank temperature)
A02	Heating boiler	E02 = °C (boiler temperature)	E02	Sensor temperature boiler	°C (boiler temperature)
A03	Door signal (phase) for FI	1: phase / 0: no phase	E03	Level sensor tank	mm (tank level)
A04	Signal for "Wash" on X3	1: phase / 0: no phase	E04	Level sensor boiler	50 – 75 =Boiler full / < 30 =Boiler empty
A06	Multifunction relay with DeMatik valve Y6	1: active / 0: inactive	E05	Water flow meter	
			E06	Clouding sensor	< 130 = tank water cloudy
A07	Tank heating	E01 = °C (tank temperature)	E07	Turns of bottom wash field	1 or 0 during the turns
A08		A07 and A08 is always activated together	E08	Turns of top wash field	1 or 0 during the turns
A09	Final rinse pump (M2)	E03 = mm (tank level)	E09	Suction lance for rinse aid	1: empty / 0: filled (delay time: 2 min.)
A10	Dispenser rinse aid (Y3)	1: phase / 0: no phase	E10	Level indicator for salt container or DeMatik liquid	1: empty / 0: filled (delay time: 2 min.)
A11	Dispenser detergent (Y2)	1: phase / 0: no phase			
A12	Drain pump (M3)	E03 = mm (tank level)	E11	Suction lance for detergent	1: empty / 0: filled (delay time: 2 min.)
A13	Solenoid valve (Y1)	E04 (50 – 60 = Boiler full / < 30 = Boiler empty)	E13	Detection 3N~ or 1N~	1N~ or 3N~
A15	Regeneration-valve Y5 on int. softener or DeMatik	1: active / 0: inactive (regeneration pump M5 is activated as well)	E14	EZEO (energy optimization)	1: active / 0: inactive
			E16	Door	1: closed door / 0: open door
A16	Rinse valve Y4 on int. softener or DeMatik	1: active / 0: inactive	Connection clamp X3 for external dosing devices		
			L1	Permanent phase	N	neutral	PE	Equipotential
A17	Energy - fan	1: active / 0: inactive	Fill	P704 = 0	Phase signal during first tank filling
FU	Frequency inverter: wash pump starts	E03 = mm (tank level) / E07 = turns of bottom wash field / E08 = turns of top wash field		P704 = 1	Phase signal during activation of solenoid valve Y1
			Wash	Phase signal during activation of wash pump, except P704 = 1	

Technical data UC
Pin Client: 1575 Pin Service: 1925

Max. water inlet temperature	60°C	Water connection	3/4 "	Tank capacity UC-M/L/XL	15.3
Max. drainage height	600mm	Drain connection	DN40	Tank capacity UC-S	9.5
Dynamic pressure standard	1-6bar	Quantity restrictor of solenoid valve	4 lit/min (3 lit/min if Energy)	Boiler capacity net	approx. 3.4