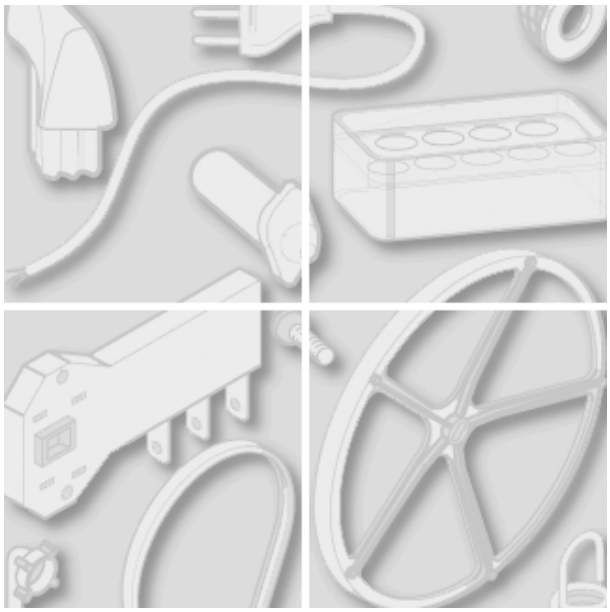
INDESIT company



Model type:
AML105EX

Commercial code:
F030582

General notes

Technical Documentation guidelines

You can find herewith some generic information to simplify cunsulting of technical documentation:

1. Models of same range share the same exploded views, which report the richest set of spare parts:generally, a model does not necessarly have a related spare part for each particular shown on exploded views.

2. Some spare parts can not be represented directly on the exploded views (instruction booklets, specific kit, etc...). You can find those codes in the spare parts list with the same reference of particular where spares are installed or with references 099, 999. Instruction booklets, once managed, appear with 000 reference.

3. On the higher right site of each exploded view there is a serial number which indicates the beginning of the production of certain range:some models might have more than an exploded view for a given category, each distinguished by a different serial no.and linked to another spare parts list, In this case, serial no. is required to supply the right spare part code. Exploded view to be considered is the one with a more recent serial no. but previous than the one of the model that needs assistance.

4.Exploded views might require further updates even after publishing. Addition of new spares will go on following the already existing numeration references. Revision number of an exploded view is shown into last four digits of serial number into upper right hand corner.

5.The spare parts list associated to an exploded view shows related codes of spares managed for a certain model; for each spare part other informations are available:

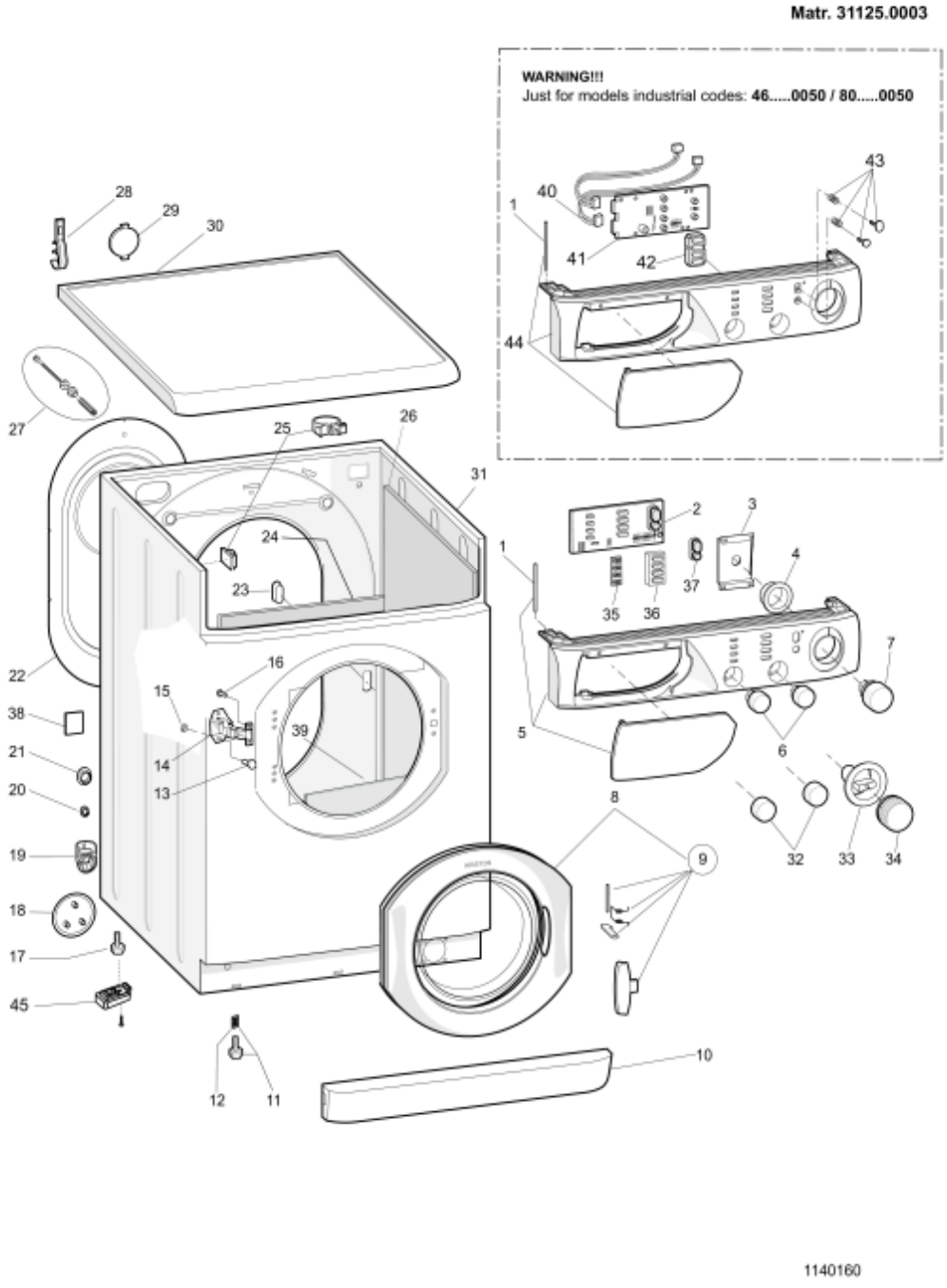
REF: reference no of spare into a table; SUBSTITUTE: list of spare(s) which can replace a code but that keeps same functional characteristics

INDUSTRIAL CODE: list of variables of a model (shown into model label) where such spare is used; NOTICE: code of information(s) to refer to complete technical intervention, track for changes or to find correct spare part code.

6. Some notices, into a same section are generic therefore cannot be directly linked to a spare part. In order to assist a model in the best way as possible, it is helpful to pay attention to all notices and constantly verify documentation updates

7.Technical documentation cover shows model name and its commercial codes

1140160 Exploded views



1140160 Spare parts list

Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
000	C00109935				user instruct.bookl es-gb-fr-rs		
000	C00109941				user instruct.bookl sl-ar-hr-bg-it		
001	C00091882				pivot pin drawer front 106.5x5		
002	C00097400				led card evoii wd	n1040331	80305820000
003	C00091890				potentiometer support avd		
004	C00113390			1 x C00119462	knob timer disc	n1040359	80305820000
							80305820050
							80305820051
004	C00119462				knob timer disc pw		80305820900
005	C00109942				control panel + handle aml105ex	n1040331	80305820000
006	C00094021			1 x C00115954	temperature knob 28 pr white 27	n1040359	80305820000
							80305820050
							80305820051
006	C00097081			1 x C00116545	dry timer knob aml b27 evoii	n1040359	80305820000
							80305820050
							80305820051
006	C00115954				temperature knob pr28 white pw		80305820900
006	C00116545				delay-timer knob pw		80305820900
007	C00091873			1 x C00115953	wash timer knob white 27 avd	n1040359	80305820000
							80305820050
							80305820051
007	C00115953				wash timer knob white pw avd		80305820900
008	C00097374		50206...	1 x C00115670	door frame+glass assy evoii	n1040349	80305820000
				1 x C00115678		n1040353	80305820050
							80305820051
008	C00115670	50207...		1 x C00116553	door frame+glass assy evoii b27	n1040353	80305820051
						n1040359	
008	C00116553				door frame+glass assy evoii pw		80305820900
009	C00092158			1 x C00116576	door handle kit b27 ariston	n1040359	80305820000
							80305820050
							80305820051
009	C00116576				door handle assy white pw		80305820900
010	C00064505			1 x C00116552	plinth white		
011	C00087084				foot		
012	C00083828				foot spring (11x8.5mm)		

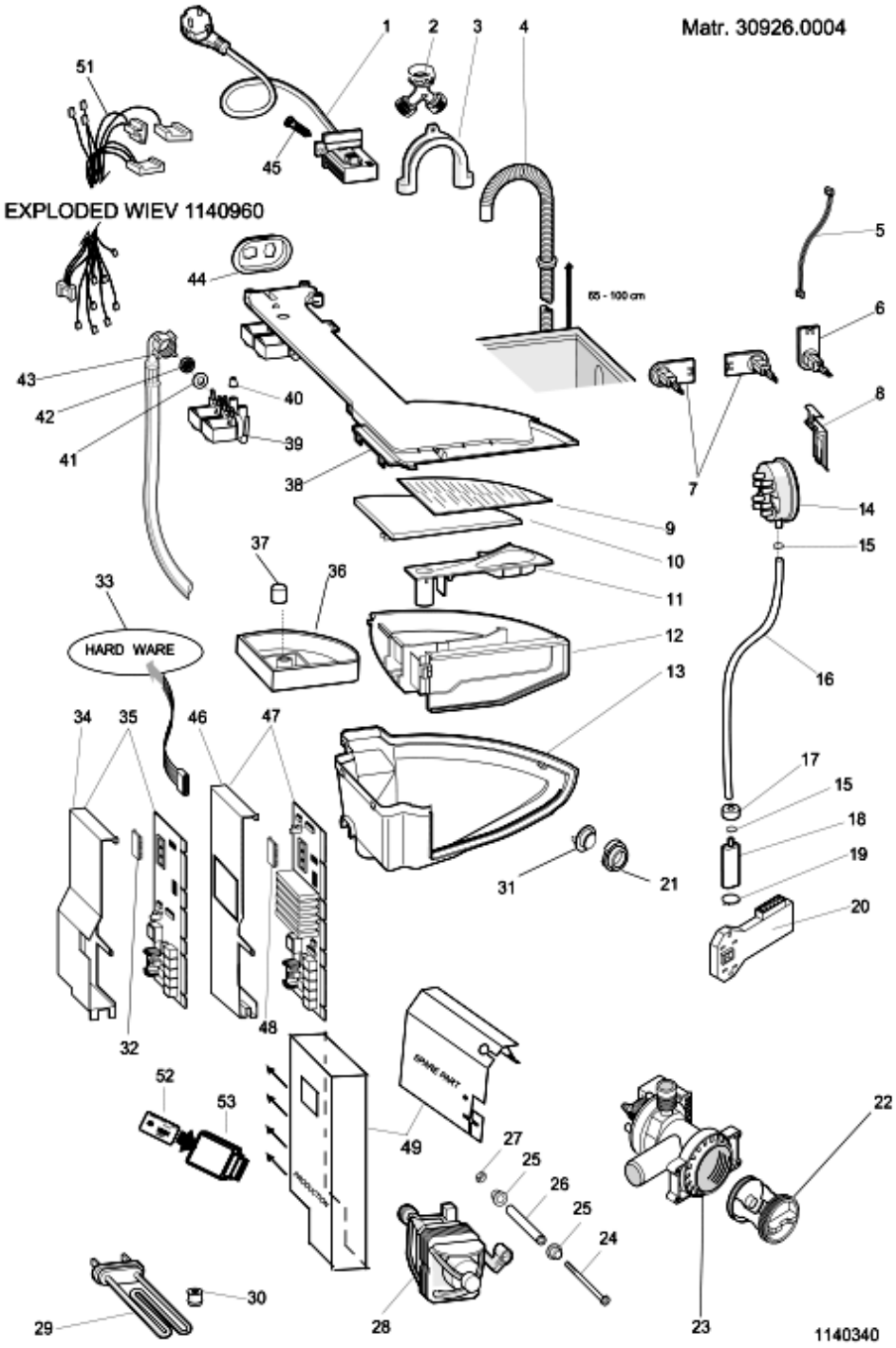
1140160 Spare parts list

Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
013	C00019846				civata t 1/2 t m4x12		
014	C00064541				outer door hinge assembly	n1040349	80305820000
						n1040359	80305820050
							80305820051
014	C00115666				zama hinge 150°		80305820900
016	C00012687				self-tapping screw hi-lo 3,5x13		
018	C00089803				blanking plug d = 53 mm		
019	C00046666				collar for drain hose		
020	C00089419				blanking plug 6.5 mm		
021	C00065871				blanking plug		
022	C00099313			1 x C00116923	rear cover - white	n1040359	80305820000
							80305820050
							80305820051
022	C00116923				rear cover - white pw		80305820900
025	C00091904				cable clamp hose		
027	C00077411				transit bolts kit (1 screw + 1		
028	C00046667				wiring stop		
028	C00064550				drain hose holder		
030	C00091867			1 x C00116550	worktop - white 595 x 522 mm	n1040359	80305820000
							80305820050
							80305820051
030	C00116550				worktop - white(pw) 595 x 522		80305820900
031	C00091836		50206...	1 x C00115662	cabinet white standard	n1040353	80305820000
				2 x C00115666			80305820050
				1 x C00115676			80305820051
031	C00115662	50207...		1 x C00116539	cabinet white standard	n1040353	80305820051
						n1040359	
031	C00116539				cabinet white standard pw evoii		80305820900
035	C00094357				light diffusor 4l evo2 avl	n1040331	
036	C00094358				keys board functions evo3 evo2	n1040331	80305820000
037	C00094356				push buttons on-off white 27 evo2	n1040331	80305820000
040	C00109854				wiring console lbe evoii		80305820000
							80305820050
							80305820051
							80305820900

1140160 Spare parts list

Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
041	C00143338				display pcb		80305820000
							80305820050
							80305820051
							80305820900
042	C00110055			1 x C00116392	silicone push buttons		80305820000
							80305820050
							80305820051
							80305820900
043	C00110115				white pushbutton on-off/reset kit	n1040359	80305820000
							80305820050
							80305820051
043	C00116359			1 x C00110115	push button on-off/start kit white		80305820900
044	C00109988				control panel + handle aml105ex	n1040359	80305820000
							80305820050
							80305820051
044	C00116753				control panel + handle pw		80305820900

1140340 Exploded views



1140340 Spare parts list

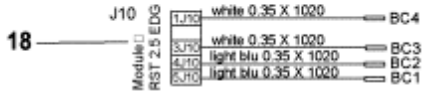
Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
001	C00091633				supply cable 3x1 schuko		
003	C00019902				plastic -u- to make drain hose		
004	C00027466				drain hose - to sink l=1860mm		
005	C00095750				wiring console avl avsl avxl evo2		
006	C00087067			1 x C00143095	programme select bitron 16		
007	C00085195			1 x C00143096	potentiometer 8 pos. idc rast 2,5		
008	C00064537			1 x C00263210	support - pressure switch		
012	C00046148			1 x C00281253	soap dispenser drawer (rotary)		
013	C00092176				dispenser body		
014	C00092262			1 x C00110327	pressure switch 1 l. +		
015	C00092412				hose clamp		
016	C00092170			1 x C00041785	pipe pressostat l= 470mm. evo ii		
017	C00019755				anti-vibration bush (foam)		
018	C00092173				air trap x oko		
020	C00065185				bolt m4,5 x 8		
020	C00085194				door interlock		
021	C00014917				grommet - thermostat		
022	C00045023				filter handle		
022	C00045025				filter seal		
022	C00045027				pump filter kit		
023	C00092264				self cleaning drain pump (hl)		
024	C00084029				bolt motor m6x34		
024	C00088372				motor bolt		
025	C00074151				rubber bush - motor mount		
027	C00040932				self locking nut m6		
028	C00092153			1 x C00288958	motor collector 850-1000 rpm		
028	C00097255			1 x C00196543	brush motor ceset 6170 a0946		
028	C00097257			1 x C00140558	tacho generator for motor ceset		
028	C00114885				carbon brush for motor sole		
028	C00114886				tachogenerator for motor sole		
028	C00273898				carbon brush for motor		
028	C00273911				tacho generator for motor welling		
029	C00066086				heating element+t cut-out 1700w		
030	C00058523				pillar retainer-heating element		
031	C00053573				temperature sensor (hl)		

1140340 Spare parts list

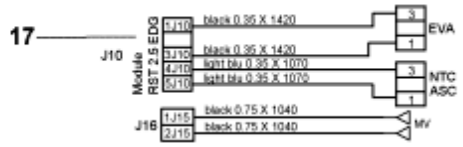
Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
033	C00066292				insulated tweezers		
033	C00084943			1 x C00099862	serial cable lb2000 - pc	n1040317	
033	C00095669			1 x C00145046	hardware key mk1	n1040317	
034	C00091908				bracket for module st		
034	C00091909				support cover		
035	C00254535				power board evoii (module)	n4008c01	
						n4208h01	
038	C00097391			2 x C00064534	hopper cover 1e 3u ev		
				1 x C00110331			
				1 x C00115914			
039	C00097393			1 x C00110331	electrovalve ie3u 7 lt.rst2,5		
040	C00064534				seal - dispenser to valve		
041	C00005572				sealing washer-mains inlet hose		
042	C00005781				inlet hose filter		
043	C00003070				mains inlet hose cold 25c 10bar		
044	C00064946				electrovalve support 1 ev		
045	C00092348				self-scraping screw 3,5x8		
049	C00254409				protecting module (mylar) (hl)		
052	C00260256				card aml105ex evoii 8kb sw	n4008c01	80305820051
							80305820900
052	C00267311				card aml105ex evoii sw	n1040342	80305820000
						n4008c01	80305820050
053	C00252539			1 x C00263927	smart reader for card 8kb		

1140960 Exploded views

The new wiring when fitted, must be securely attacched to the machine wiring with insulating tape. **Matr. 61116.0001**



WIRING P = DRUM BLOCK COD. C00141995



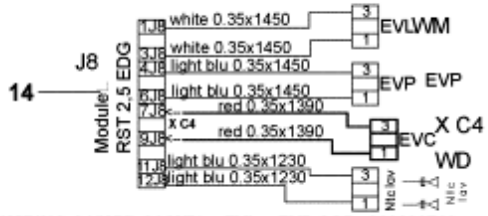
WIRING F = EVA+NTCAS / WIRING G = MTV COD. C00141769



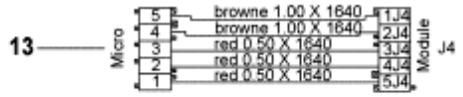
WIRING P = DRUM BLOCK COD. C00112822



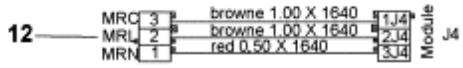
WIRING B2 = DISPLAY CONNECTION COD. C00111227



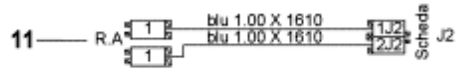
WIRING C1(WM) C3(WD) = EVL + EVP COD. C00093713
WIRING C4 (WD) = EVL + EVP + EVC COD. C00109960



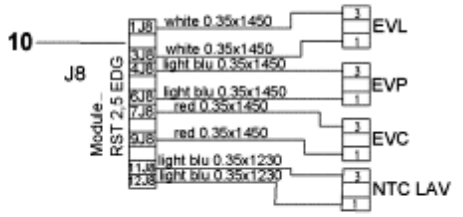
WIRING D = INTERLOCK. + MICRO SWITCH COD. C00093714



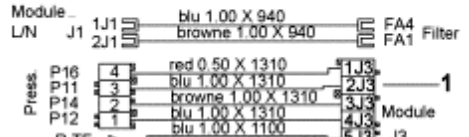
WIRING D1 = INTERLOCK. COD. C00093715



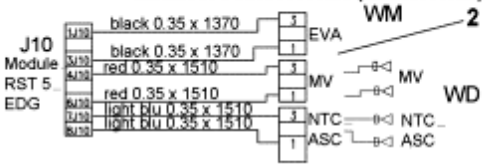
WIRING H = DRYING ELEMENT COD. C00093716



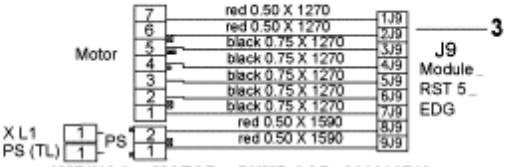
WIRING C = EVL + EVP + EVC COD. C00093724



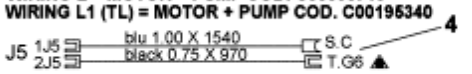
WIRING A COD.C00141139 (ex C00093722)



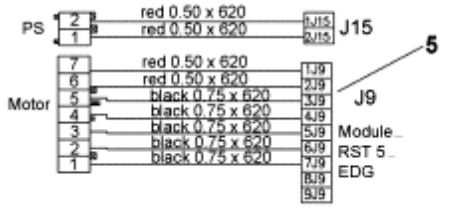
WIRING F = EVA + MV + NTCAS COD.C00093717



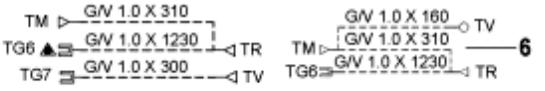
WIRING L = MOTOR + PUMP COD. C00093718
WIRING L1 (TL) = MOTOR + PUMP COD. C00195340



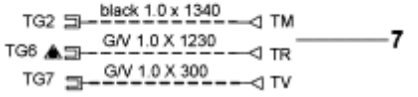
WIRING I = CONDUCTIVITI SENSOR COD. C00093725



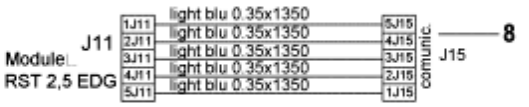
WIRING N = MOTOR + PUMP COD. C00093719



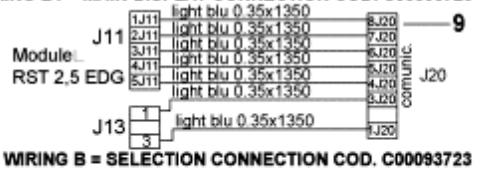
WIRING X = EART STD MACCHINE COD. C00093720



WIRING Y = EART TRI-PHASE MACCHINE COD. C00093721



WIRING B1 = MAIN-DISPLAY CONNECTION COD. C00093726



WIRING B = SELECTION CONNECTION COD. C00093723

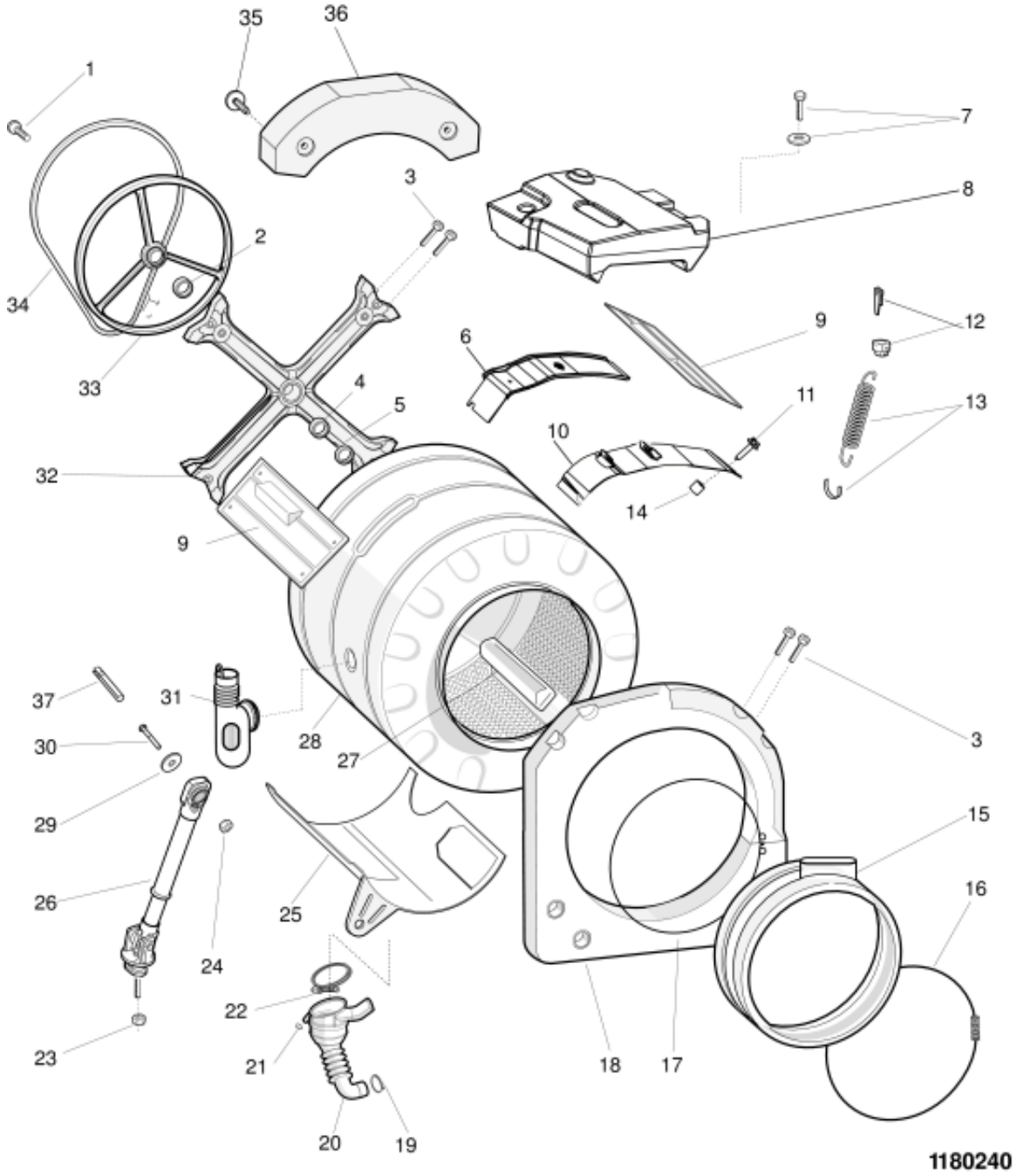
1140960

1140960 Spare parts list

Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
001	C00141139				wiring		
002	C00093717		60610...		wiring eva - mv - ntcas		80305820000 80305820050 80305820051 80305820900
003	C00093718				wiring pump-motor-module j9 (hl)		
006	C00093720				wiring standard earth	n1040331	
008	C00093726				wiring display	n1040331	80305820000
011	C00093716				wiring dryer heater-module j2		
012	C00093715			1 x C00259857	wiring door lock-module j4		
014	C00093713				wiring ntc-evl+evp-module j8		
015	C00111227				wiring display		80305820050 80305820051 80305820900
017	C00141769	60611...			wiring module-electrovalve-dry		80305820900

1180240 Exploded views

Matr. 30926.0004



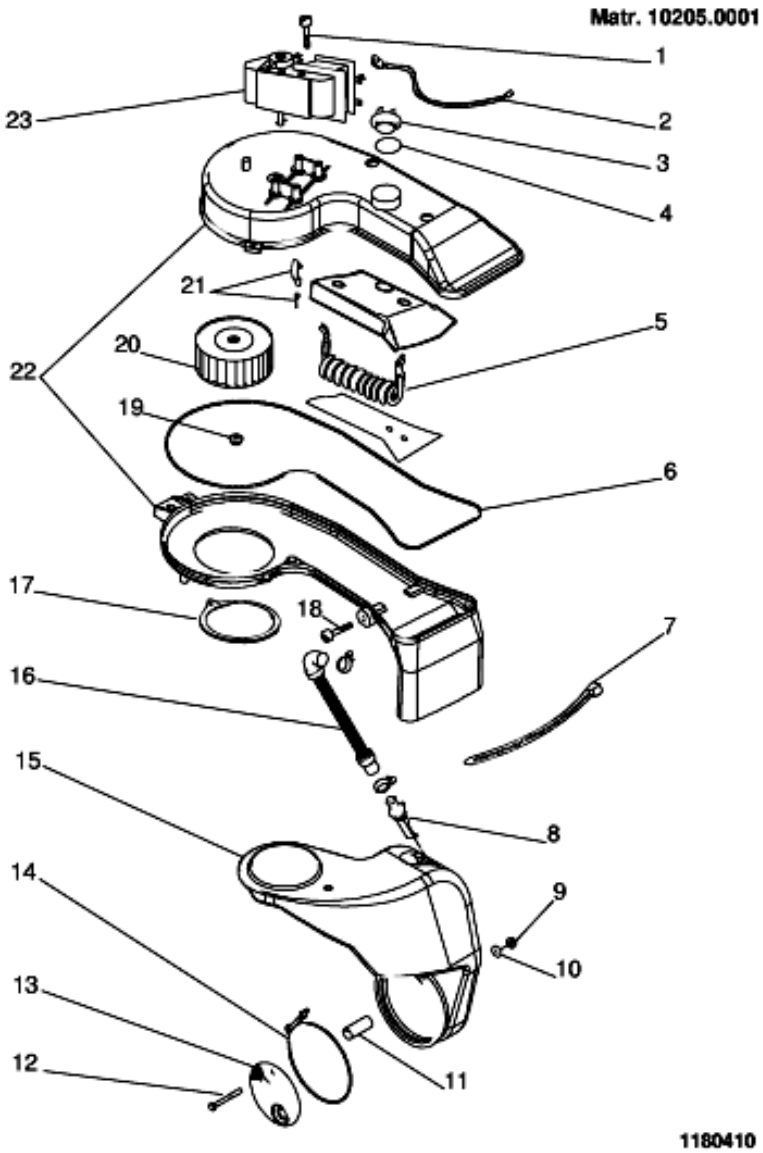
1180240 Spare parts list

Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
001	C00064786			1 x C00143260	bolt m8x23 torx tefl		
002	C00002590				bearing 17x40x12 6203-2z skf		
003	C00064785			1 x C00193879	bolt m8x22 tb6lt		
004	C00002591				bearing 20x47x14		
005	C00042890				sealing ring 600 rpm		
006	C00080651			1 x C00032847 1 x C00114387 1 x C00114390 1 x C00145190	rear support		
007	C00088408				bolt + washer	n1040342	80305820000 80305820050
008	C00087811				upper counterweight 8.2 kg	n1040342	80305820000 80305820050
009	C00080761			1 x C00064517	tank cradle channel-top dx wd		
010	C00080650				front support		
011	C00080652				bolt m8x36 tefl. zig. p/p		
012	C00064515				anchorage pad - suspension		
013	C00080660				suspension spring - tank		
014	C00080653				spacer		
015	C00097371				door seal		
016	C00092156				door seal retainer front		
017	C00092155				door seal- rear retainer		
018	C00092178				front counterweight		
020	C00092174				hose tank to filter with oko ball		
022	C00091148			1 x C00094908	clamp d=79 mm		
023	C00065152				nut romob m6x22x1,5		
024	C00030443			1 x C00047136 1 x C00144571	nut romob m8		
025	C00093848				cradle outer- set	n1040325	
026	C00303583				kit shock absorber 120 n 8,15 mm		
027	C00064789			1 x C00268109	lifter - extractable		
028	C00094276			1 x C00094275 1 x C00094277	outer- set 46 l.	n1040300	
031	C00092273				hose dispenser to tank		
032	C00064514			1 x C00112708	bearing spider assembly		

1180240 Spare parts list

Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
033	C00064527				drum pulley cone d=280 mm h=		
034	C00066521				belt l=1181 mm h8		
035	C00114487				fixing screw x back		80305820051
036	C00114386				back counterweight		
099	C00001109				loctite 270 10 gr.		
099	C00033026			1 x C00292523	ambljgon grease ta 100 gr.		

1180410 Exploded views



1180410 Spare parts list

Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
001	C00087921				screw amsp m3.5x30t.e.(s/n		
002	C00080775			1 x C00199364	thermal cut-out cable		
003	C00098739				temperature sensor ntc rast 2,5 (hl)		
004	C00080768				o-ring d= 27 x 23,5 x 1,78 wd		
005	C00080765				dryer heating element 1200w) (hl)		
006	C00032847				blower manifold seal		
007	C00033210				hose clamp fastex 350 mm x 7.8		
008	C00032845				restrictor seat		
009	C00080960				self blocking nut m5		
010	C00080959				connection gasket		
010	C00097378				connection gasket		
011	C00080771				clip		
012	C00080773				fixing screw for lint filter		
013	C00080772		60212...	1 x C00143947	lint filter		80305820000
				1 x C00143949			80305820050
							80305820051
							80305820900
013	C00143949	60212...			lint filter		80305820900
014	C00080774				hose clamp		
015	C00080770		60212...	1 x C00143947	steam condenser		80305820000
				1 x C00143949			80305820050
							80305820051
							80305820900
015	C00143947	60212...			steam condenser		80305820900
016	C00080769				hose electrovalve condenser		
017	C00032844			1 x C00255433	seal - condenser / tank		
018	C00038358				bolt m8x16 (dry loc)	n1040342	80305820000
							80305820050
019	C00032972				blower fixing nut		
020	C00080658				blower fan for motor (087920-		
021	C00054790				screw trilob m5 x 16 tcb t.e. st		
022	C00087919				blower manifold kit	n1040342	80305820000
							80305820050
022	C00114388				blower manifold kit s/n		80305820051
023	C00087920			1 x C00098711	motor dryer 230v 50hz s/n		

1180410 Spare parts list

Ref.	Code	From	To S/N	Substitute	Description	Notice	Industrial
024	C00114390				fixing screw m8x25s		80305820051
514	C00140821				bolt m5x16		

Notices

n1040242: Power card with welded eeprom.

From serial number 20304.0001, IDC power card with welded eeprom is used to ensure the perfect connection of all parts, in the Comunanza, Teverola and Brembate factories.
To replace the module with welded eeprom, it will be necessary to use the eeprom indicated in the SAT document of the model concerned.
To replace the module on a unit with welded eeprom both the SAT module and the eeprom are required, because the latter cannot be reused.

n1040296: List of EVOII FAULTS and troubleshooting.

In case of washing-machine fault in carrying out the self-test function, the machine reproposes the fault previously signalled and the same fault is shown on the display of the new hardware key.
The type of fault can be signalled in different ways:
- on AVD models the fault is shown directly on the machine display.
- on AVL models the fault is signalled by LEDs.

Reading of Faults signalled by LEDs
When the machine has a fault:
1. The window is locked
2. The door lock light flashes fast (> 1 Hz)
3. The control panel LEDs light up, to signal the fault, according to the table (fig. 01).
The example shown in fig. 02 (Example Fault F03) below indicates which LEDs are flashing if the machine has Fault F03

List of faults, malfunctions and Warnings:

F01: Triac Motor short circuit
- Check for water leaks that may affect connector J9 causing the relevant contacts to short
- Check the motor terminal block (possible problems due to chemical effects of work residuals on the contacts which may cause short-circuiting)
- Replace Card

F02: Motor blocked, Tachometrics in Short Circuit/Open
- Check motor if blocked

- Check efficiency of J9 connector on card
- Check the tachometric winding verifying an ohmic resistance reading of 115 - 170 ohm between pins
1 and 2 on wiring connector J9. In case of short circuit/open circuit check the wiring between pins 1 and 2 of J9 relevant to the tachometrics. With three-phase motor, make sure there is ohmic continuity between J9 pins 6 and 7.
- Replace motor
- Replace card

F03: NTC Open or in Short Circuit or washing heater relay stuck (signalled in presence of full load)
- Check efficiency of J8 connector contacts on card
- Check NTC verifying that the ohmic resistance value at room temperature 20°C is approx. 20Kohm on J8 wiring connector pin 11 and 12.
- If the measurement is incorrect check J8/NTC wiring continuity
Check the same parameter directly on NTC
- Replace NTC
- Replace Card

F04: Simultaneous empty and overflow (pressure switch stuck on empty).
If the pressure switch contact is stuck on empty the washing-machine loads water until reaching the overflow. The drain pump is automatically started by the contact on the overflow pressure switch.
- Check efficiency of J3 connector contacts on card
- Check pressure switch status by checking ohmic continuity on wiring connector J3 pins 2 and 4 (it must only be present with tub empty), pins 2 and 3 (it must only be present with water in the drum) and pins 2 and 1 (it must only be present with water in the tub above normal level, more than halfway up door glass).
- Check wiring of connector J3/pressure switch
- Replace pressure switch
- Replace card.

F05: Pump Blocked or pressure switch empty not reached
- Check efficiency of J9 connector on card, verifying a voltage of 220V between pins 8 and 9
- Check that pump if being fed
- Check Pump Filter + wall drain
- Change Pump
- Replace Card

F06: No on AVD and AVL

F07: No Wash Heating Element Absorption (the fault is only signalled with the pressure switch on empty)
- Check efficiency of J3 connector contacts on card
- Check continuity of the wash heating element on J3 connector pins 5 and 6. The 1800W 230V heating element has a resistance of 25 ohm.
- Check connection of pressure switch J3 connector pins 2 and 3: there must not be ohmic continuity (shared with full load).
Check connection of pressure switch J3 connector pins 2 and 4: there must be ohmic continuity
- Replace Heating Element
- Replace Pressure Switch
- Replace Card

F08: Wash Heater Relay Stuck (signalled in presence of empty) or pressure switch stuck on Full (simultaneously empty and full)
- Check efficiency of J3 connector contacts on card
- Check pressure switch status by checking ohmic continuity on wiring connector J3 pins 2 and 4 (it must only be present with tub empty), pins 2 and 3 (it must only be present with water in the drum) and
pins 2 and 1 (it must only be present with water in the tub above normal level, more than halfway up door glass).
- Check wiring J3/pressure switch
- Check connection of heating element J3 connector pins 5 and 6.
- Replace pressure switch
- Replace Card

F09: Machine Setup Error (Eeprom error)

- In case of production card with Eeprom soldered: replace the card and Eeprom
- In case of replacement of Eeprom and card, check correct housing of Eeprom on card socket

F10: No full and empty signal
- Check efficiency of J3 connector contacts on card
- Check pressure switch status by checking ohmic continuity on wiring connector J3 pins 2 and 4 (it must only be present with tub empty), pins 2 and 3 (it must only be present with water in the drum) and
pins 2 and 1 (it must only be present with water in the tub above normal level, more than halfway up door glass).
- Check wiring of connector J3/Pressure switch
- Replace Pressure Switch
- Replace Card

F11: No Pump Feedback (Drain pump disconnected or winding broken)
- Check efficiency of J9 connector on card
- Check continuity of the Pump on J15 connector pins 1 and 2 (in case of washing-machine with Easy Door door lock) or on J9 connector pins 8 and 9 (in case of conventional door lock), checking a resistive value equal to 170 ohm.
- Check wiring of connector J15 (or J9)/Pump
- Replace Pump
- Replace Card

F12: No Communication Display/LED Card-Main Board
- Check efficiency of contacts on card of J11 connector
- Check the continuity of J11 connector-display card 5-pin connector
- Replace Main Board
- Replace Display Card/LED

F13: Drying NTC sensor open / Drying system NTC wiring disconnected
Check efficiency of J10 connector on card
Check NTC on J10 connector pins 7 and 8 verifying that the ohmic value of the sensor at room temperature 20°C is approx. 20Kohm
Check continuity of NTC/J10 connectors wiring
Replace NTC
Replace card

F14: Drying heater open or not connected
Check efficiency of J2 connector contacts on card
Check continuity of drying heater on J2 wiring connector pins 1 and 2, verifying that the ohmic value of the 1300W 230V heating element is approx. 40Kohm
Check wiring of connector J10/drying heater
Replace heating element
Replace card

F15: Drying heater always on (drying relay contact stuck or drying Triac short circuit)
Check efficiency of J2 connector contacts on card of
Check wiring of connector J2/drying heater
Check wiring of connector J3/pressure switch
Replace card

F16: Drum locking (top-loading only)

F17: Door lock unfed/open (with Easy Door)
- Check presence of 230V mains power on J4 wiring connector inserted on card between pins 3 and 4,
(not present with machine on standby) and presence of power from 230V door lock between pins 3 and 5
- Check ohmic continuity of the door microswitch on J4 connector inserted on card between pins 1 and 2 (with door closed/on open/off)
- Check continuity of J4/door lock wiring
- Check door hooking

- Replace door lock
- Replace card

F17: Door lock unfed/open (conventional door lock, not Easy Door)
- Check presence of 230V mains power on J4 wiring connector inserted on card between pins 2 and 3,
(not present with machine on standby) and presence of power from 230V door lock between pins 3 and 1
- Check door hooking
- Replace door lock
- Replace card

F18 --> Communication error microprocessor / DSP (Digital Signal Processor)
- Replace card

COMBINAZIONE LED

SIMBOLOGIA:
= LED ACCESO = LED SPENTO

FAULT	LED Fasi	TASTI FUNZIONI			
F01	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F02	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F03	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F04	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F05	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F06	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F07	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F08	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F09	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F10	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F11	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F12	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F13	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F14	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F15	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F16	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F17	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4
F18	LED 4	Tasto 1	Tasto 2	Tasto 3	Tasto 4

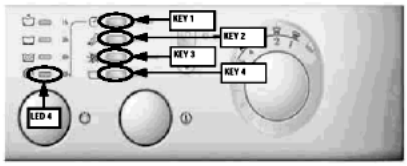


ARISTON



INDESIT

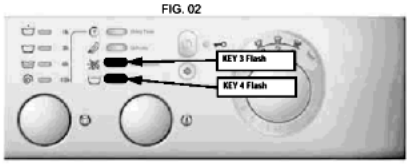
FIG. 01



Fault	Key 1	Key 2	Key 3	Key 4	Led 4
01	Off	Off	Off	Flash	Off
02	Off	Off	Flash	Off	Off
03	Off	Off	Flash	Flash	Off
04	Off	Flash	Off	Off	Off
05	Off	Flash	Off	Flash	Off
06	Off	Flash	Flash	Off	Off
07	Off	Flash	Flash	Flash	Off
08	Flash	Off	Off	Off	Off
09	Flash	Off	Off	Flash	Off
10	Flash	Off	Flash	Off	Off
11	Flash	Off	Flash	Flash	Off
12	Flash	Flash	Off	Off	Off
13	Flash	Flash	Off	Flash	Off
14	Flash	Flash	Flash	Off	Off
15	Flash	Flash	Flash	Flash	Off
16	Off	Off	Off	Off	Flash
17	Off	Off	Off	Flash	Flash

Table Fault LED

FIG. 02



Example Fault F03

Tabla de averías para lavadora EVO II



	CO	MBINACIÓN LED				
FAULT	CAU SA	LED Fase	TECLAS FUNCIONES			
F01	Triac control motor en corto	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F02	Motor bloqueado, taquimetro motor abierto / en corto	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F03	Sonda NTC lavado abierta / en corto	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F04	Vacio + sobrenivel presostato simultaneamente	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F05	No se logra vacio presostato bomba desagua bloqueada	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F06	Error de selector (no encuentra código)	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F07	Falta absorción en la resistencia de lavado	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F08	Relé resistencia de lavado con el contacto NA/NC pegado	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F09	Error umap file (EEPROM no programada o correcta)	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F10	Presostato en Rotor+Vacio o sin señal de vacio ni lleno	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F11	Falta alimentación a la bomba de desague	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F12	Falta comunicación entre módulo display y modulo de control	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F13	Sonda NTC secado abierta/corto. Ventilador secado bloqueado	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F14	Falta alimentación a la resistencia de secado	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F15	Contacto relé resistencia de secado pegado	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F16	Bloqueo de cesto (solo carga superior)	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F17	Bloqueo puerta desalineado /abierto	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4
F18	Error de comunicación Micro/DSP (MODULO)	LED 4	Tecla 1	Tecla 2	Tecla 3	Tecla 4

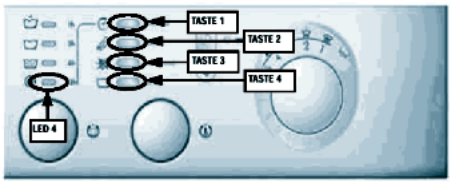
– LED

SIMBOLOGIA:

– led encendido

– led apagado

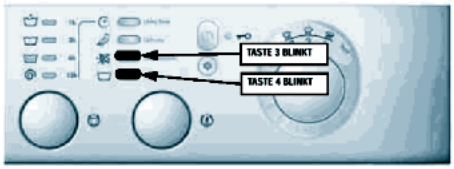
ABB. 01



Fault	Taste 1	Taste 2	Taste 3	Taste 4	Led 4
01	Ausgeschaltet	Ausgeschaltet	Ausgeschaltet	Blinkt	Ausgeschaltet
02	Ausgeschaltet	Ausgeschaltet	Blinkt	Ausgeschaltet	Ausgeschaltet
03	Ausgeschaltet	Ausgeschaltet	Blinkt	Blinkt	Ausgeschaltet
04	Ausgeschaltet	Blinkt	Ausgeschaltet	Ausgeschaltet	Ausgeschaltet
05	Ausgeschaltet	Blinkt	Ausgeschaltet	Blinkt	Ausgeschaltet
06	Ausgeschaltet	Blinkt	Blinkt	Ausgeschaltet	Ausgeschaltet
07	Ausgeschaltet	Blinkt	Blinkt	Blinkt	Ausgeschaltet
08	Blinkt	Ausgeschaltet	Ausgeschaltet	Ausgeschaltet	Ausgeschaltet
09	Blinkt	Ausgeschaltet	Ausgeschaltet	Blinkt	Ausgeschaltet
10	Blinkt	Ausgeschaltet	Blinkt	Ausgeschaltet	Ausgeschaltet
11	Blinkt	Ausgeschaltet	Blinkt	Blinkt	Ausgeschaltet
12	Blinkt	Blinkt	Ausgeschaltet	Ausgeschaltet	Ausgeschaltet
13	Blinkt	Blinkt	Ausgeschaltet	Blinkt	Ausgeschaltet
14	Blinkt	Blinkt	Blinkt	Ausgeschaltet	Ausgeschaltet
15	Blinkt	Blinkt	Blinkt	Blinkt	Ausgeschaltet
16	Ausgeschaltet	Ausgeschaltet	Ausgeschaltet	Ausgeschaltet	Blinkt
17	Ausgeschaltet	Ausgeschaltet	Ausgeschaltet	Blinkt	Blinkt

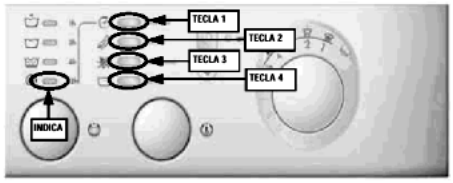
Tab. Störung Led

ABB. 02



Beispiel Störung F03

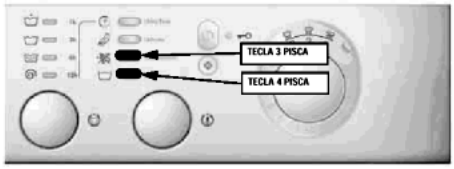
FIG. 01



Fault	Tecla 1	Tecla 2	Tecla 3	Tecla 4	Indicador luminoso 4
01	Apagado	Apagado	Apagado	Pisca	Apagado
02	Apagado	Apagado	Pisca	Apagado	Apagado
03	Apagado	Apagado	Pisca	Pisca	Apagado
04	Apagado	Pisca	Apagado	Apagado	Apagado
05	Apagado	Pisca	Apagado	Pisca	Apagado
06	Apagado	Pisca	Pisca	Apagado	Apagado
07	Apagado	Pisca	Pisca	Pisca	Apagado
08	Pisca	Apagado	Apagado	Apagado	Apagado
09	Pisca	Apagado	Apagado	Pisca	Apagado
10	Pisca	Apagado	Pisca	Apagado	Apagado
11	Pisca	Apagado	Pisca	Pisca	Apagado
12	Pisca	Pisca	Apagado	Apagado	Apagado
13	Pisca	Pisca	Apagado	Pisca	Apagado
14	Pisca	Pisca	Pisca	Apagado	Apagado
15	Pisca	Pisca	Pisca	Pisca	Apagado
16	Apagado	Apagado	Apagado	Apagado	Pisca
17	Apagado	Apagado	Apagado	Pisca	Pisca

Tab. Fault indicador luminoso

FIG. 02



Exemplo Fault F03

n1040325: New shock absorber fixing system with pin

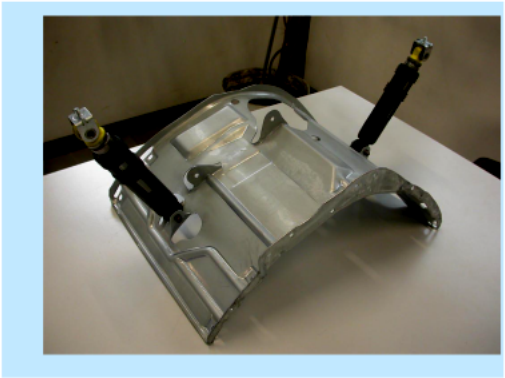
From serial no. 40427.0001, shock absorbers have been fixed to the tank unit cradle with two 11 mm pins code C00110163 (see fig. 01 and 02 enclosed) in place of the 8 mm screws code 093750 and relevant locking nuts code 030443, on all washing



Cruscotto - Tableau de borde - Belde - Control panel
Painel frontal - Quadro Mandos - Kontrol paneli

machines and dryers produced in the Comunanza factory.
The items affected by this modification are:
1) The cradles have the same Service code, as they can be used in place of the new ones after widening the shock absorber fixing holes to a diameter of 10 mm.
Code 093848 - Tank unit cradle 46 lt
Code 093878 - Tank unit cradle 40 lt.
2) The new shock absorbers, with fixing bushing having no s/steel spacer, are not managed as they are interchangeable with the premodified items (make sure they are CIMA type, as the managed items), fixed with M8 screws code 093750 and related locking nut code 030443 (see figs. 05 and 06).
Code 093884 - Shock absorber 80 N
Code 093885 - Shock absorber 100 N

To remove the shock absorber from the tank, first extract the pin with a few hammer taps (see fig.03) until it is aligned with the tank bracket and then pull it out with a pair of pliers (see fig. 04).
(To refit the shock absorber use a new pin. Insert the pin until the toroidal edge is aligned with the bracket.)













n1040331: Ariston LED restyling

From serial no. 40429.0001, models AVL, AVXL, AVSL, AML have been equipped with a new panel with well holes for the ON/OFF and RESET buttons and flush plastic light diffusers in place of the projecting siliconed ones (see picture n10402231

Fig.02). These features determine whether an appliance is modified or premodification.
The modification has also involved the electronic card whose panel and display communication connectors are on the left and not at the back (see picture n10402232 Fig.2).

The codes affected by this modification are:

For model AVSL85PL only
C00109966 - PANEL + HANDLE AVSL85PL LC

For model AVSL85EU only
C00109956 - PANEL + HANDLE AVSL85EU LC

For both models
C00143338 - LED CARD EVOII AVL /BUILT-IN ARISTON
C00110115 - WHITE BUTTONS ON-OFF/RESET EVOII LED KIT
C00109854 - PANEL WIRING LBE EVOII
C00110055 - SILICONED BUTTONS AVL-AVSL
C00110059 - PANEL WIRING -DISPLAY 240000848B2.
C00111227 - WIRING MAIN - DISPLAY 24000084804B1 (POLARIZED).
The new parts are only interchangeable with the pre-modification ones if used altogether. They are not individually interchangeable.

This modification progressively involves all models of the Ariston Led range. The last two numbers of the Industrial Code for the modified models is 50 (e.g. 80299050050).

Brembate production (cod.ind 91...) s/n 40628.0001

n1040338: Masked microprocessor and software 9.0.0.

All Ariston LED models produced in the Comunanza factory (from serial no. 40913.0001) and in the Teverola and Brembate factories (from serial no. 40922.0001) have been equipped with a display module with masked microprocessor and software 9.0.0.
The new LED module has the same SAT code as the previous item C00109856, and can be used on premodification models except for those listed below, for which, if a LED module needs replacing, it will be necessary to replace also the power card and eeprom.
For these models, the eeproms in stock in the various Warehouses have been reprogrammed with new software and can also be used on premodified appliances.

Models affected:
30580 - AML101AG
30582 - AML105EX
30588 - AML119TK
30591 - AML125AUS
30590 - AML125EX
30598 - AML129EU
30576 - AML85EX
30596 - AML89EU
33968 - AV62EU

Fig. n10402231



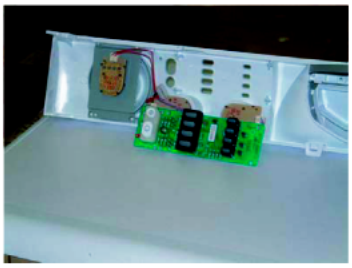
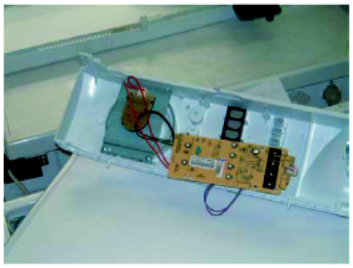


Fig. n10402232



30063 - AVL61EX
28480 - AVL85TK
30357 - AVL100PR
29844 - AVL105EX
30206 - AVL105SK
28482 - AVL105TK
29700 - AVL109R
29841 - AVL129EU
28637 - AVL129R
32854 - AVL135FR
33180 - AVL145DETE
30365 - AVL145DE
29850 - AVL145EU
33612 - AVL145EUTE
29455 - AVL149R
32855 - AVL160FR
29849 - AVL169EU
33244 - AVL62EO
30062 - AVL62EX
33685 - AVL62KW
30612 - AVL65PT
30092 - AVL66PIT
28444 - AVL80R
30093 - AVL86PIT
29920 - AVSL105EU
28429 - AVSL109IT
29701 - AVSL109R
30023 - AVSL125EU
31930 - AVSL129IT
29769 - AVSL129R
29116 - AVSL66IT
28427 - AVSL68IT

28638 - AVSL80R
29117 - AVSL89IT
33214 - BWD129ALL
33213 - BWM129UK
32570 - CDE129ALL
32569 - LBE129ALL
32306 - LBE68ALL
29772 - AVXL109R
30081 - AVL62EX
30879 - AVL68ITBG
33191 - AVL66PITBG
30208 - AVL82EU

n1040342: New balancing system for washer-dryer models with spin cycle up to 1200 rpm.

From serial number 41026.0001, all WIDL, AML, AMD washer-dryer models up to 1200 rpm produced in the Comunanza plant are equipped with a new balancing system for the mobile assembly (see fig.001).
The modification involves the following parts, which are not interchangeable with their premodification equivalents:

C00114386 - REAR COUNTERWEIGHT WD 6 kg;
C00114388 - DRYER KIT BLOWER BODY S/N 41026.0001;
C00114390 - BLOWER BODY FIXING SCREW SN 41026 M8X25S.P.P.
C00114487 - REAR COUNTER-WEIGHT FIXING SCREW M8X32TE.
In preparation for this modification, drum spiders already prearranged with fixing holes for the rear counter-weight (see attached image) have been installed on production appliances and included in the spare parts programme.

The use of the new counter-weight calls for a new EEPROM: this must be strictly utilised only on the following models and serial numbers; in addition, the last two numbers of the Industrial code (given on the rating plate) of the modified models are 51 (e.g. 80322500051).
List of EEPROMs introduced:

Serial no.41026.0001
C00273522- CARD AML125FR EVO II S/W 28300070005
C00260205 - CARD AMD129EU EVOII SW 28305890002
C00260206 - CARD WIDL126FR EVOII S/W 28305340103
C00260207 - CARD WIDL126SUK EVOII S/W 28305590002
C00260212- CARD WIDL126UK EVOII S/W 28305380002
C00252462 - CARD WIDL126EX EVOII S/W 28305700002
C00260216 - CARD WIDL126DE EVOII S/W 28319800002
C00260217- CARD WIDL126SDE EVOII S/W 28319810002
C00267138 - CARD WIDL126SEX EVO II S/W 28319830002
C00260218 - CARD AML135FR EVOII S/W 28319780003
C00260219 - CARD WIDL102UK EVOII S/W 28305360002
C00260220 - CARD AML81AG EVOII S/W 28305780002
C00260223 - CARD AML105K60HZ EVOII SW 28305850002
C00260253 - CARD WIDL106EX EVOII S/W 28319660002
C00260254 - CARD AML85EX EVOII SW 28305760003
C00260255 - CARD AML101AG EVOII S/W 28305800003
C00260256 - CARD AML105EX EVOII SW 28305820003
C00267135 - CARD AML80AG EVO II S/W 28322500003.

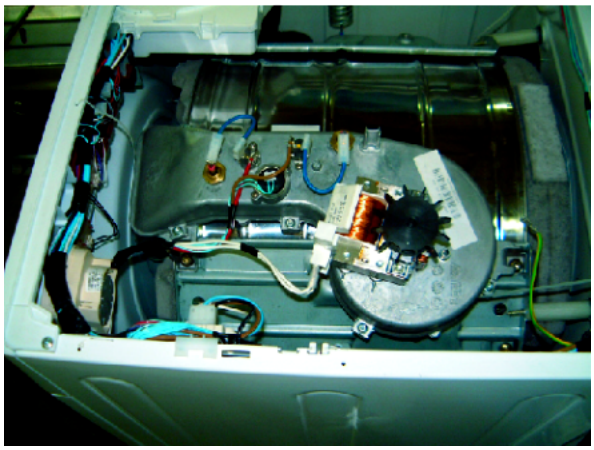
Serial no. 41109.0001
C00273528 - CARD AMD109EU EVO II S/W 28305920001
C00262007 - CARD AML89EU EVOII S/W 28305960002
C00262008 - CARD WIDL86EX EVOII S/W 28319650002
C00262010 - CARD WIDL106AUS EVOII S/W 28323050002

Serial no.41118.0001
C00273536 - CARD AML119TK EVO II S/W 28305880002
C00268452- CARD WIDL106EX60HZ EVO2S/W 28332040002

Serial no. 41129.0001
C00252464 - CARD AML129EU EVOII S/W 28305980003
C00262011 - CARD AML125EX EVOII S/W 28305900003
C00262015 - CARD AML125AUS EVOII S/W 28305910003.

For premodification products use the EEPROM shown in the documentation but not in this Bulletin.
The models affected by this modification are:
30007 - AML125FR
30534 - WIDL126FR
30536 - WIDL102UK
30538 - WIDL126UK
30559 - WIDL126SUK
30570 - WIDL126EX
30576 - AML85EX
30578 - AML81AG
30580 - AML101AG
30582 - AML105EX
30585 - AML105K60HZ
30589 - AMD129EU
31966 - WIDL106EX
31978 - AML135FR
31980 - WIDL126DE
31981 - WIDL126SDE
31983 - WIDL126SEX
32250 - AML80AG.
30592 - AMD109EU
30596 - AML89EU
31965 - WIDL86EX
32305 - WIDL106AUS
30588 - AML119TK
33204 - WIDL106EX60HZ
30598 - AML129EU
30590 - AML125EX
30591 - AML125AUS.

n1040349: Introduction of 150° Zamac hinge on Ariston 46 models.



From serial no. 50207.0001, all Ariston models produced in the Teverola factory (see table 001 attached) with industrial code (given on the rating plate) starting with 46, have been equipped with a Zamac hinge with 150° opening angle, code C00115666 (see Fig.001).
This modification has involved the introduction of the following items:

Code C00115670 - Complete door EVOII 150° white 27 with standard glass;
Code C00115674 - Complete door EVOII 150° white 27 with long glass;
Code C00115667 - EVOII body for 150° hinge white 27;

The premodified items are not interchangeable separately with the modified ones.

Code C00110133 - Complete door EVOII Standard 180° white 27 standard glass;
Code C00092157 - Complete door EVOII 180° white 27 long glass;
Code C00096193 - EVOII body for 150° hinge white 27;

The hinge code C00064541 continues to be used on the build-under models produced in the Comunanza factory.

		CABINET		DOOR				HINGE	
		180°	150°	180°	150°	180°	150°	180°	150°
Model	Code	C00096193	C00115667	C00092157	C00115670	C00110133	C00115674	C00064541	C00115666
AV 82 (TK)	28479	X	X	X	X			X	X
AVL 85 (TK)	28480	X	X	X	X			X	X
AV 102 (TK)	28481	X	X	X	X			X	X
AVL 105 (TK)	28482	X	X	X	X			X	X
AVD 10 (TK)	28485	X	X	X	X			X	X
AVL 125 (EU)	29774	X	X	X	X			X	X
AVL 62 (EX)	29775	X	X	X	X			X	X
AV 61 (EU)	29890	X	X			X	X	X	X
AVL 6 E (IT)	30055	X	X	X	X			X	X
AVL 62 (EX)60HZ 40-F	30062	X	X	X	X			X	X
AVL 61 (EX)115-60	30063	X	X			X	X	X	X
AV 51 (EX) 50-60	30064	X	X			X	X	X	X
AV 41 (EX) 50-60	30065	X	X			X	X	X	X
AV 41 (AG) 50-60	30066	X	X			X	X	X	X
AV 51 (AG) 50-60	30067	X	X			X	X	X	X
AVL 86 P (IT)	30093	X	X	X	X			X	X
AVL 105 (SK)	30206	X	X	X	X			X	X
AVL 100 P (R)	30357	X	X	X	X			X	X
AVL 95 (AUS)	30361	X	X	X	X			X	X
AV 51 (EO)	30498	X	X			X	X	X	X
AVL 65 (PT)	30612	X	X	X	X			X	X
AV 102 (CSI)	31970	X	X	X	X			X	X
AV 40 (AG) 50-60	32303	X	X			X	X	X	X
AVL 145 (DE) (TE)	33180	X	X	X	X			X	X
AV 42 (EX) 50-60	33217	X	X			X	X	X	X
AV 52 (EX) 50-60	33218	X	X			X	X	X	X
AVL 62 (EO)	33244	X	X	X	X			X	X
AVL 145 (EU) (TE)	33612	X	X	X	X			X	X
AVL 62 (KW)	33685	X	X	X	X			X	X
AV 62 (EU)	33968	X	X	X	X			X	X
AVF 10 (TK)	33979	X	X	X	X			X	X
AVF 8 (TK)	34214	X	X	X	X			X	X
AVF 149 (EU)	34217	X	X	X	X			X	X
AVL 135 (FR) (TE)	34239	X	X	X	X			X	X
AVL 140 (FR) (TE)	34240	X	X	X	X			X	X
AVL 14 (FR)	34479	X	X	X	X			X	X
AV 8 (IT)	35974	X	X	X	X			X	X
AV 10 (IT)	35975	X	X	X	X			X	X

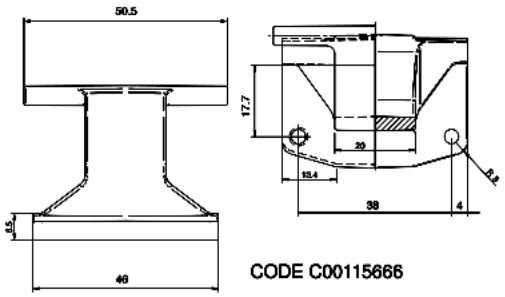


Fig . 001

n1040353: Introduction of 150° Zamac hinge on Ariston models (Comunanza).

From serial no. 50207.0001, all Ariston models produced in the Comunanza factory (see table 001 attached) with industrial code (given on the rating plate) starting with 80, have been equipped with a Zamac hinge with 150° opening angle, code C00115666

(see Fig.001).
This modification has involved the introduction of the following items:

Code C00115670 - Complete door EVOII 150° white 27 with standard glass;
Code C00115674 - Complete door EVOII 150° white 27 with long glass;
Code C00115668 - Complete door EVOII 150° silver with standard glass;
Code C00115673 - Complete door EVOII 150° silver snella standard glass;
Code C00115662 - EVOII body for 150° hinge white 27
Code C00115663 - EVOII body for 150° hinge silver 27
Code C00115664 - Snella EVOII body for 150° hinge white 27
Code C00115665 - Snella EVOII body for 150° hinge silver

The premodified items are not interchangeable separately with the modified ones.

Code C00096416 - Complete door EVOII LB 180° standard depth silver;
Code C00097374 - Complete door EVOII 180° WD 180° white 27 long glass;
Code C00110133 - Complete door EVOII Standard 180° white 27
Code C00110178 - Complete door EVOII Snella 180° Silver;
Code C00091836 - EVOII body white 27 for 180° hinge;
Code C00094306 - EVOII body silver for 180° hinge;
Code C00094305 - Snella EVOII body white 27 for 180° hinge;
Code C00094307 - Snella EVOII body silver for 180° hinge;

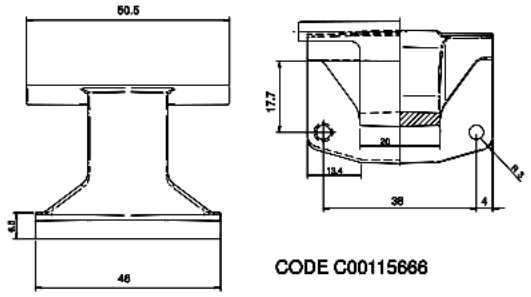


Fig . 001

From serial no. 50315.0001, the new "Polar White" colour is used on all washing machines and washer-dryers produced in factory 80 in place of White 27.
The third last number of the Industrial Code given on the rating plate of the modified models is 9 (e.g. 80286390900).
To determine the new Polar White codes, it is necessary to know the industrial code or serial number of the appliance being repaired.
The new items, which bear the initials "PW" in place of "B27", are not aesthetically interchangeable with premodification items as the whites are different. Both colours will be available for some time.
The items affected by this modification are:
Body, rear panel, top, control panel, handles, buttons, knobs, knob disc, door and plinth.

n4008c01: Smart Card - LVB/DRYERS

Beginning April 2008 spare parts warehouse started to manage the EVOII modules with eeprom fixed, these can only be programmed with smart card/palmare/pc.

Attention!! The premodification with eeprom socket can be programmed with smart card/palmare/pc using a blank eeprom or with pre programmed eeprom.

Spare parts of modules with eeprom fixed/eeprom socket:

C00265676 with eeprom fixed - C00143068 with eeprom socket - for models with conducibility sensor
C00254298 with eeprom fixed - C00143068 with eeprom socket - for models without conducibility sensor
C00254297 with eeprom fixed - C00259941 with eeprom socket
C00254531 with eeprom fixed - C00143058 with eeprom socket
C00254297 with eeprom fixed - C00143057 with eeprom socket - for models without blocking drum
C00265697 with eeprom fixed - C00143057 with eeprom socket - for models with blocking drum
C00254297 with eeprom fixed - C00143056 with eeprom socket
C00254530 with eeprom fixed - C00259738 with eeprom socket
C00254533 with eeprom fixed - C00143060 with eeprom socket
C00254535 with eeprom fixed - C00145013 with eeprom socket
C00254530 with eeprom fixed - C00145551 with eeprom socket
C00254529 with eeprom fixed - C00142293 with eeprom socket
C00257406 with eeprom fixed - C00143989 with eeprom socket
C00257409 with eeprom fixed - C00144151 with eeprom fixed
C00254530 with eeprom fixed - C00143069 with eeprom fixed

DRYERS
C00255835 with eeprom fixed - C00258789 with eeprom socket
C00255835 with eeprom fixed - C00194077 with eeprom socket

This notice has a "reference list" specific for each product where you can find the link between smart card and the eeprom code with the same software.

n4208h01: Module Wiring Change

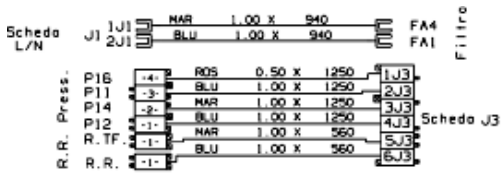
On Comunanza manufactured washer dryers (factory code 80) produced from serial number 60601.0001 the module connection

J10 to the dryer heater box changed from a single connection to a double connection identified by reference J13 & J14.

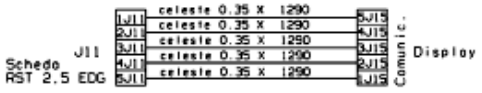
When fitting this module to a product produced before serial number 60601.0001 it will be necessary convert the J10 connection to J13 & J14 by fitting harness part code C00141769.
NOTE: When carrying out this conversion it is IMPERATIVE that the old wiring is either removed completely from the product or safely secured into the existing wiring loom with suitable "Cable Ties" and "Insulation tape"
The module programme and function is not affected.

Electric schemes and links

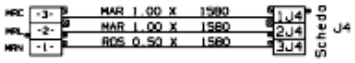
Cod. 16001789400



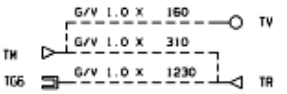
COMPLESSIVO A



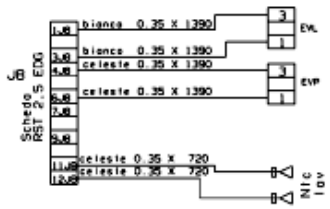
COMPLESSIVO B1 = COMUNICAZIONE DISPLAY



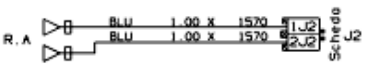
COMPLESSIVO D1 = Microrit



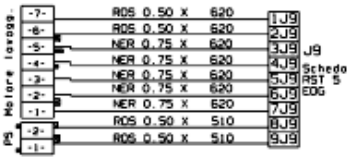
COMPLESSIVO X = TERRA MACC.STD



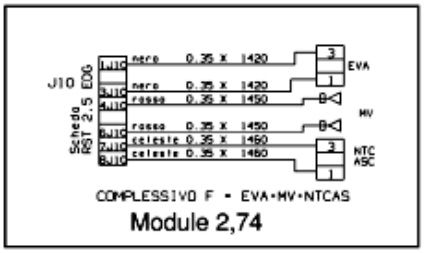
COMPLESSIVO C3 = EVL+EVP

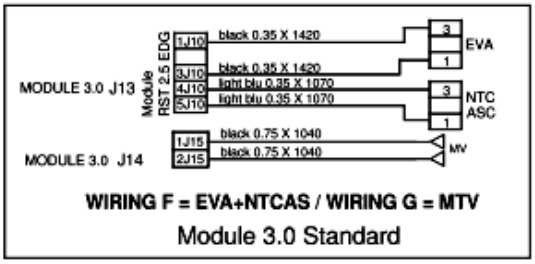


COMPLESSIVO H = RES.ASCIUGATURA



COMPLESSIVO L = Motore+pompa





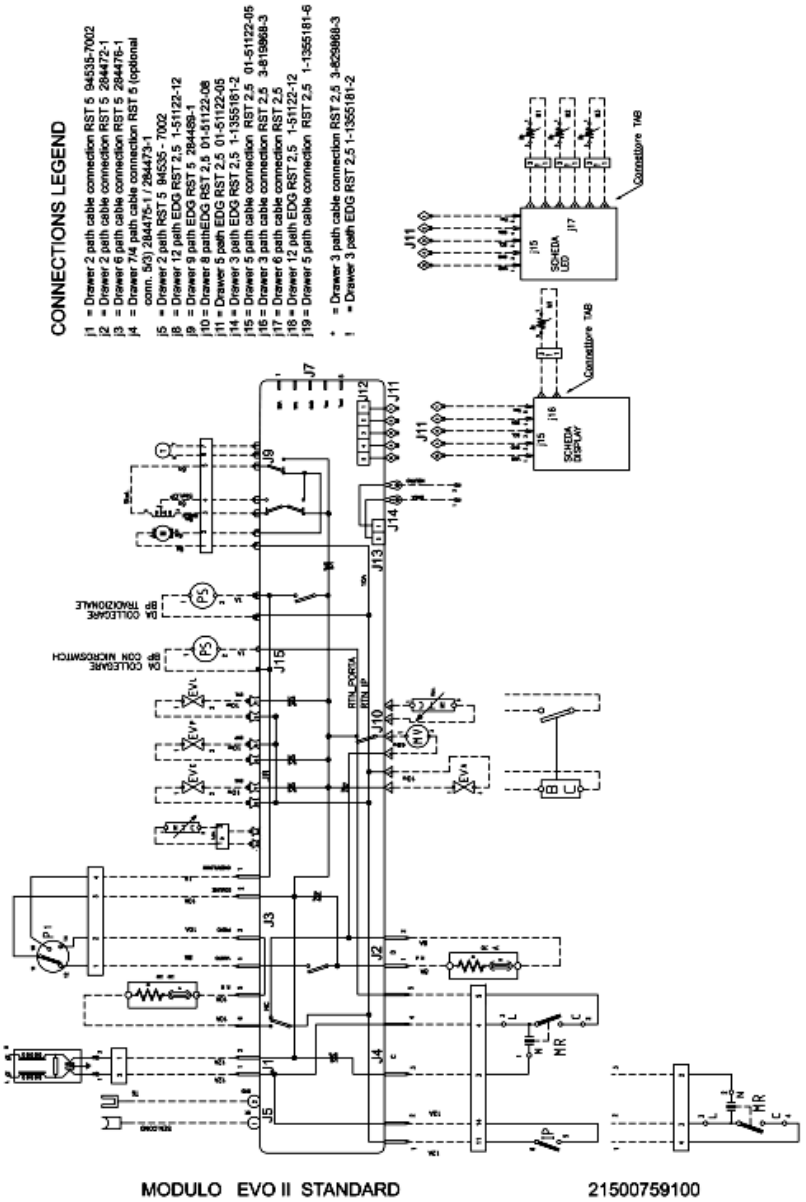
16001789400

Legend

Legend: 16001789400

Electric schemes and links

Cod. 21500759100

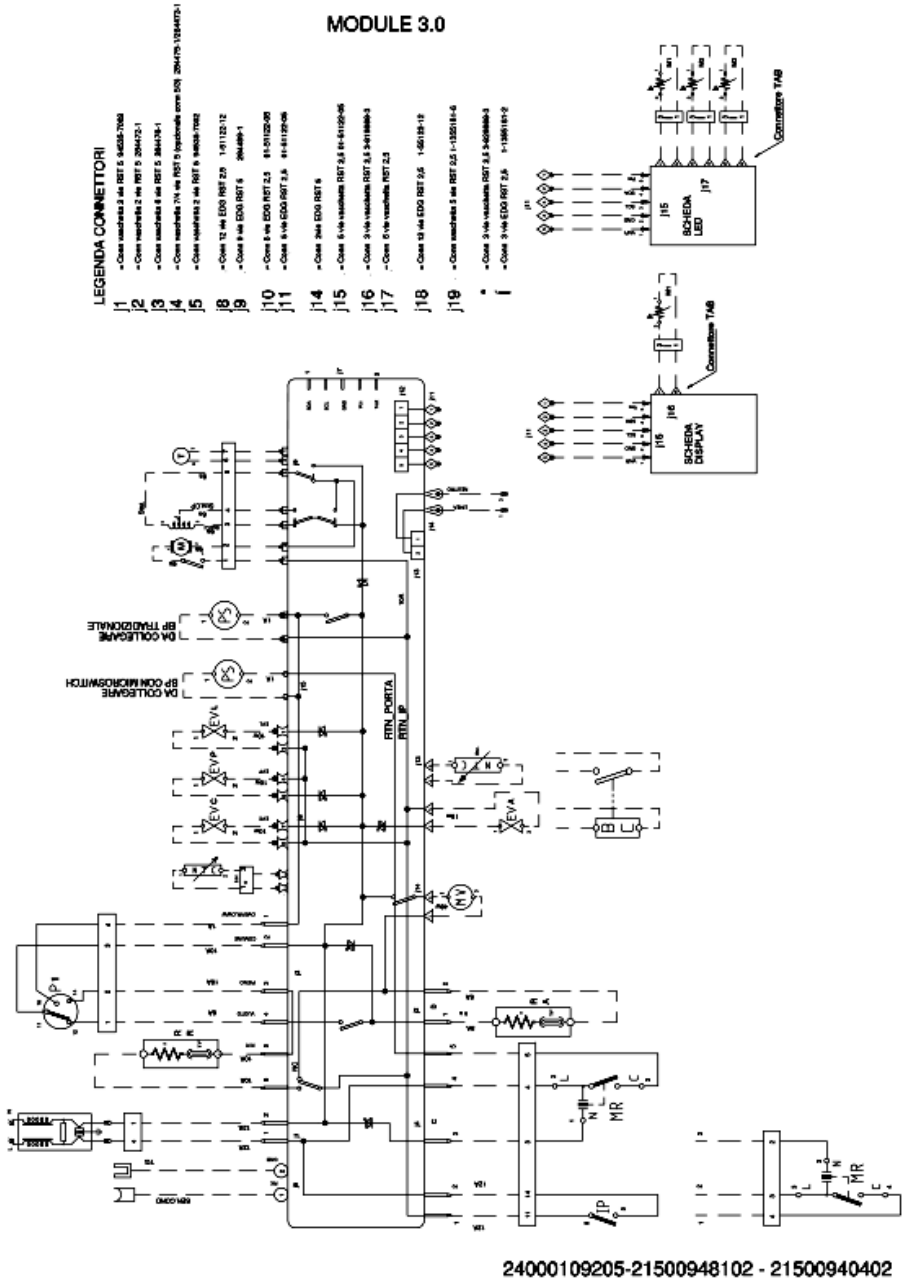


Legend

Legend: 21500759100

Electric schemes and links

Cod. 24000109204-30



Legend

Legend: 24000109204-30