



Service-Information

Abluft Wäschetrockner

AWZ 3413

8575 341 72230

Letzte Änderung: 07.06.2008

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Die vorliegenden Serviceunterlagen sind ausschließlich für technisch qualifizierte Fachkräfte bestimmt, welche mit den entsprechenden einschlägigen Sicherheitsvorschriften vertraut sind.
Änderungen vorbehalten

Ersatzteilliste

Pos-Nr.	12NC	Beschreibung
004 0	4812 440 11038	Boden RO 1/2"
004 1	4812 466 38078	Schutz,el.Baut. /Boden AV
011 0	4812 500 18054	Fuss
012 0	4812 528 78033	Rolle
012 1	4812 528 98003	Drehstift vorn + Rolle
012 2	4812 520 28068	Drehstift hinten
021 0	4812 440 10867	Frontblende RO GW
022 0	4812 440 10821	Seitenplatte GW
024 0	4812 440 10713	Rueckwand AV
030 0	4812 440 11189	Arbeitsplatte R0 WH EBL
033 0	4812 310 18582	Kit Abdeckung
100 0	4812 440 11134	Tuer R0 EBL WH
131 1	4812 271 38462	Tuerverriegel. RO GW
133 0	4812 498 18359	Handgriff Tuer /Haken WH EBL
191 0	4812 466 68539	Tuerdichtung
220 0	4812 418 18177	Trommel kpl. SS
223 0	4812 418 89017	Mitnehmer GW
271 0	4812 358 18186	Riemen 1965 H6 EH80
273 0	4812 358 18055	Spannrolle
275 0	4812 492 68129	Feder
291 0	4812 466 68563	Dichtung vorne
291 2	4812 466 68837	Dichtung hinten
301 0	4812 452 15274	Schalterleiste AWZ 3413 bedruckt
321 1	4812 452 15275	Aufkleber AWZ 3413 franzoesisch
331 0	4812 412 59071	Knopf Timer EBL
332 0	4812 410 29252	Taste Opt. EBL weiss
333 0	4812 513 18151	Taste Start EBL
401 0	4812 361 18361	Motor inkl. Luefterrad
401 1	4812 401 18421	Klemme Motor
420 0	4812 121 18144	Kondensator 10 mF
421 0	4812 121 18158	Entstoerfilter
443 0	4812 361 18292	Geblaese Rad
456 0	4812 259 28884	Heizelement 2300W + Blech
490 0	4812 321 18044	Netzkabel o.Stecker 5m 4x1
490 0	4812 321 18042	Anschlusskabel 3m
490 1	4812 321 28433	Zugentlastung + Schutz
492 1	4812 401 18195	Klammer f.Erdung
521 0	4812 214 79303	Steuerung (CB) WH AV ALPHA EE
551 3	4812 282 08651	Thermostat 1/2"
633 1	4812 276 18422	Stift Start Reset GW
653 3	4812 134 48324	Lichttraeger ALPHA WH
692 0	4812 278 58001	Sensor
743 0	4812 530 48631	Luftfuehrung RO GW
743 1	4812 530 18011	Heizkanal
743 2	4812 466 68538	Abschottdicht.
761 0	4812 480 58323	Filter RO GW
794 0	4812 466 28107	Dichtung
900 1	4812 290 88053	Klammer
902 1	4812 256 38002	Halterung Lagerrolle
903 0	4812 532 28028	Clip Kabel

Pos-Nr.	12NC	Beschreibung
910 8	4812 502 48348	Schraube ST 4,2x11
912 6	4812 502 48353	Schraube 4x20
922 0	4812 532 58005	Sicherungsring
922 1	4812 532 58007	Sicherungsring
962 0	4812 466 38012	Schutz Motor
962 2	4812 466 38056	Folie Aluminium Anzeige Elektr.
993 0	4812 263 78014	Adapter
993 1	4812 310 18413	Zubehoer Abluftschlauch AMH 577

Technische Daten

Abmessungen + Gewicht

Abmessungen Gerät	
Höhe	85 cm
Breite	59.5 cm
Tiefe	56 cm
Gewicht	
Brutto	33 kg
Netto	31 kg

Umgebungstemperatur

Zimmertemperatur	5 °C - 35 °C
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Luftfeuchtigkeit (Aufstellort)

relative Luftfeuchtigkeit	
max.	95 %

Elektrische Basisdaten

Spannung	230 V
Frequenz	50 Hz
Sicherung	16 A
Gesamtanschlusswert	2.8 kW

Trommeldaten

Inhalt	112 l
Trommeldrehzahl	56 ± 3 rpm

Luftdurchsatz

.....	120 - 160 m ³ /h
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Fassungsvermögen

Baumwolle	
max.	5 kg
Pflegeleicht	
max.	2.5 kg

Elektrische Bauteile

Heizung	
Typ	Aluminium mass heating IRCA 1T.8275001
Nennspannung	230 +10%, -15% V
Gesamtleistung	2300 W ± 5%
Heizungswiderstand	
Anschlusspunkte	r20
Luftschlauch (außen)	19.1 - 23.5 Ω

Innendurchmesser 10 cm
Max. erlaubte Länge 4 m

(with 2 bows)

TD THERMOSTATS

Sicherheitsthermostat

(in heater) TL

Ausschalttemperatur 298 -10 °C
Heizungswiderstand °C

of solder 260

Flusenthermostat

(in heater) TH 1.2

Ausschalttemperatur 195 ± 7.5 °C
Hysteresis 12 - 25 K
Abluftthermostat (im Luftkanal) TH 1.1 TH 1.1
Einschalttemperatur 38 ± 5 °C
Ausschalttemperatur 53 ± 4 °C

Elektronikmodul

Typ Alphontronic
Nennspannung 230 +10%, -15% V
Frequenz 50/60 Hz
Nennstrom
Motor ≤ 10 A
Heizung ≤ 16 A
Umgebungstemperatur up to 85 °C
Lagertemperatur -25 to 85 °C

caution: if one of the thermostats (tl, th1.2) is defective, the whole heating element has to be changed for safety reason! therefore, the thermostats are not available as separate spare parts!

Antriebs- und Gebläsemotor

Typ
1-Phasen Asynchronmotor
Nennspannung 230 +10%, -15% V
Frequenz 50 Hz
Anschlusswert 295 W ± 7%
Wicklungswiderstand
Hauptwicklung (2 - 3) 24.7 Ω ± 7%
Hilfsspule (2 - 1) 25.6 Ω ± 7%
Nennzahl bei 5 kg Wäsche und 100% Restfeuchte 2730 rpm
Kondensator 10 μ F ± 7%

Funkentstörfilter

Typ ISKRA KPB 7325
Spannung max. 275 V
Nennkapazität 100 nF X1 + 2 x 15 nF Y2 + 1M Ω

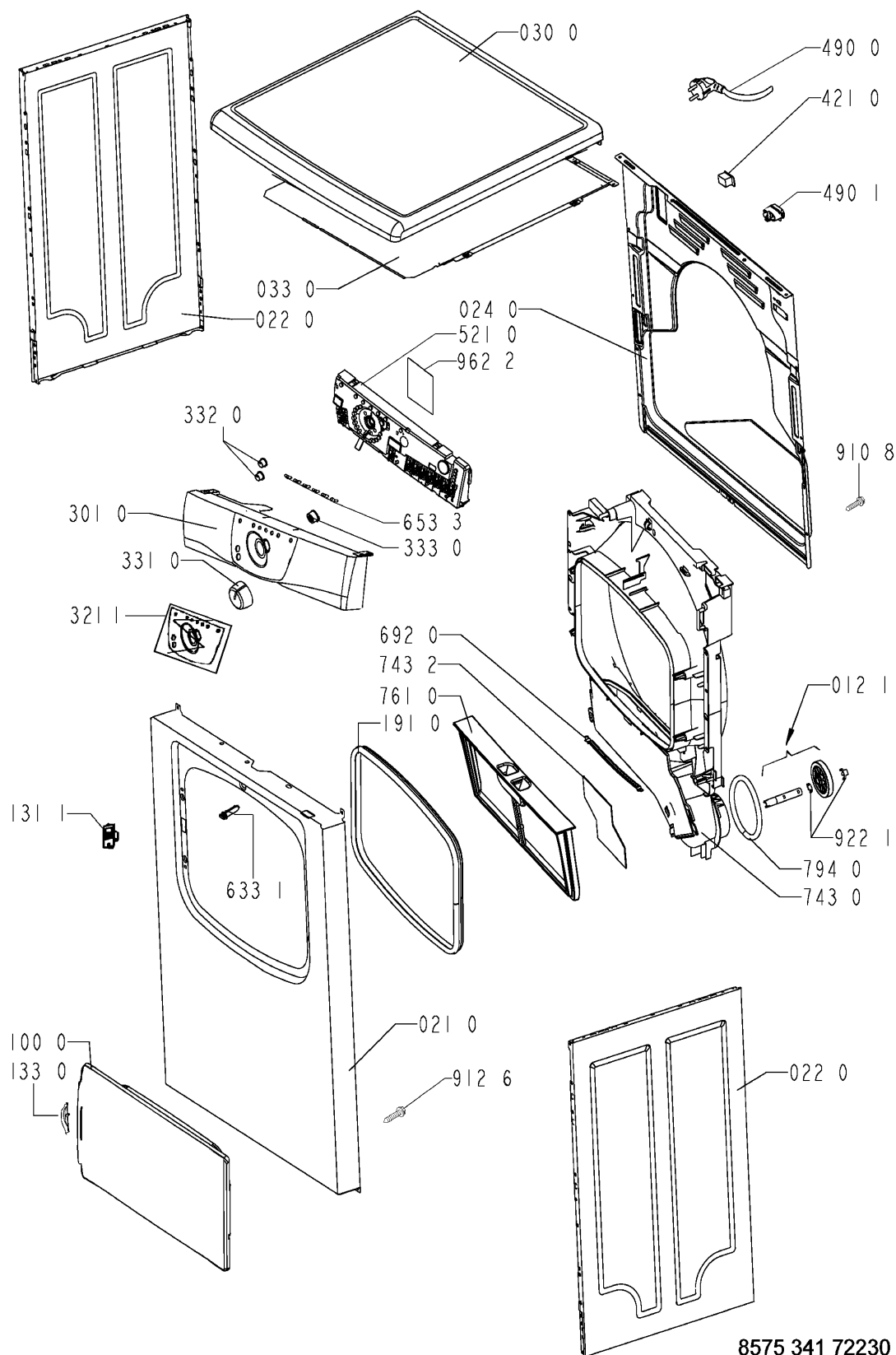
Anzeigen

Anzahl LEDs 7
Programmwahlschalter 11 positions integrated ON/OFF
Optionen
 Start
 Schonen
 Summer

Effizienzklasse

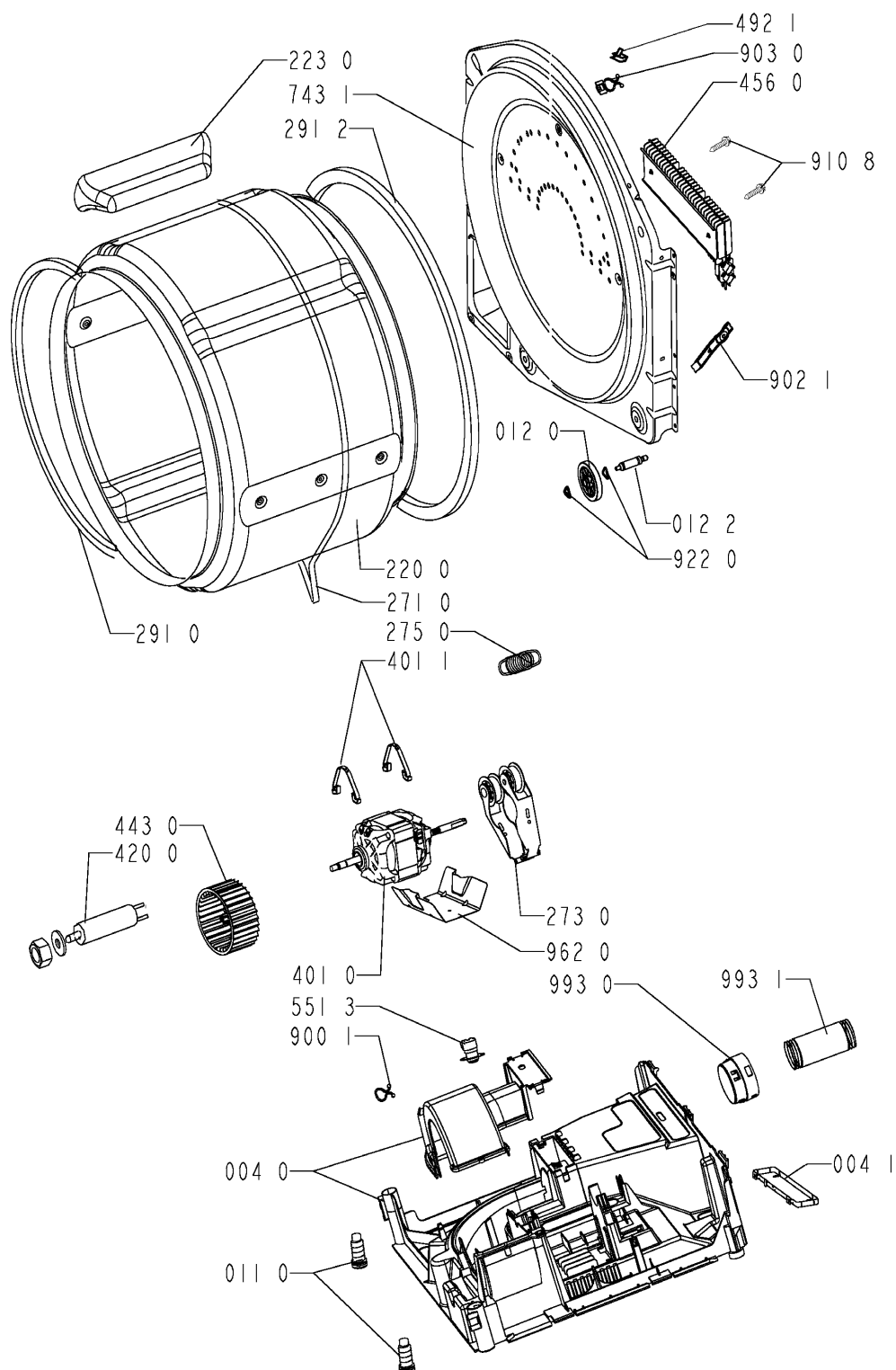
Energieklasse C

Explosionszeichnung



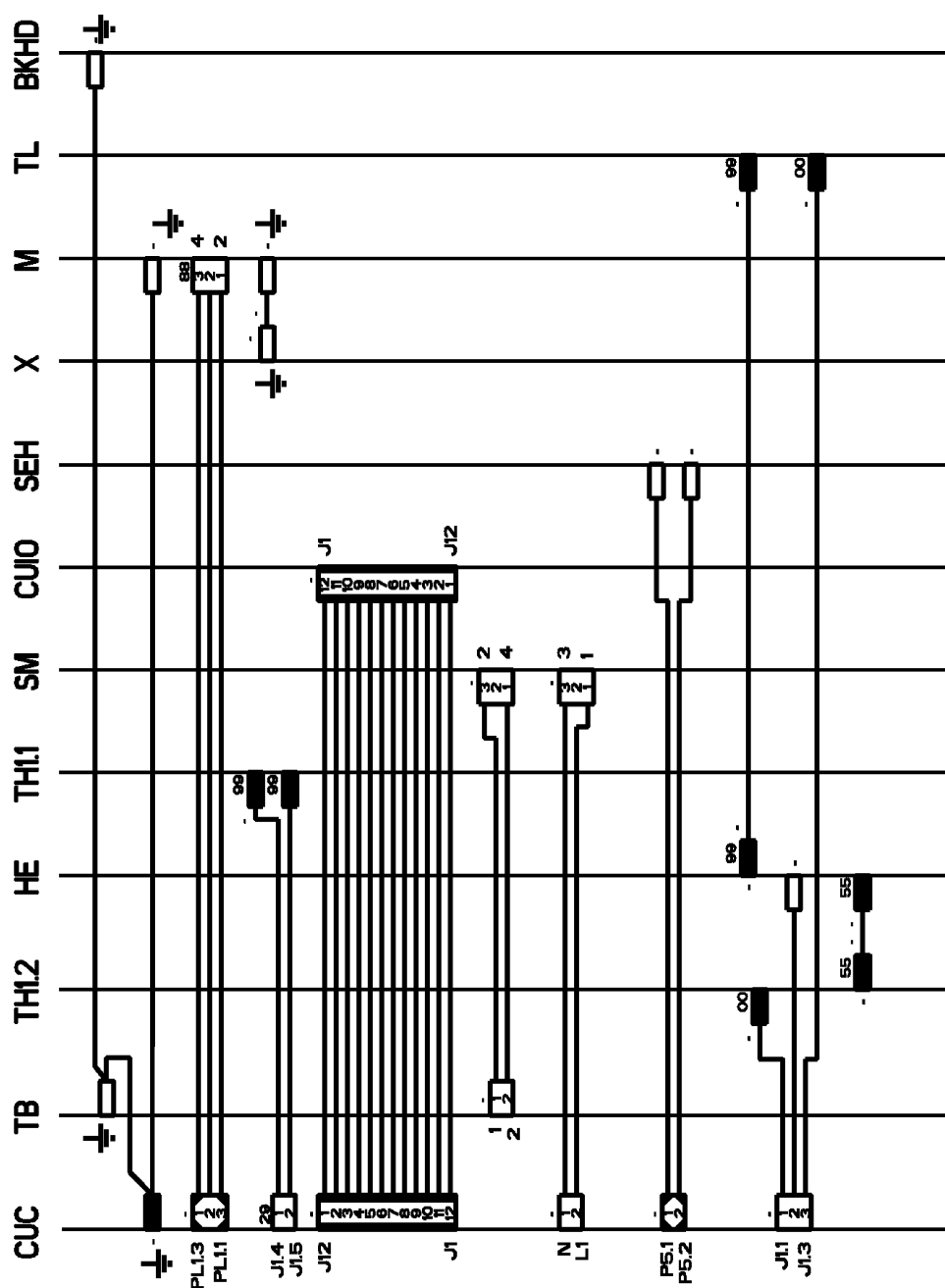
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Explosionszeichnung



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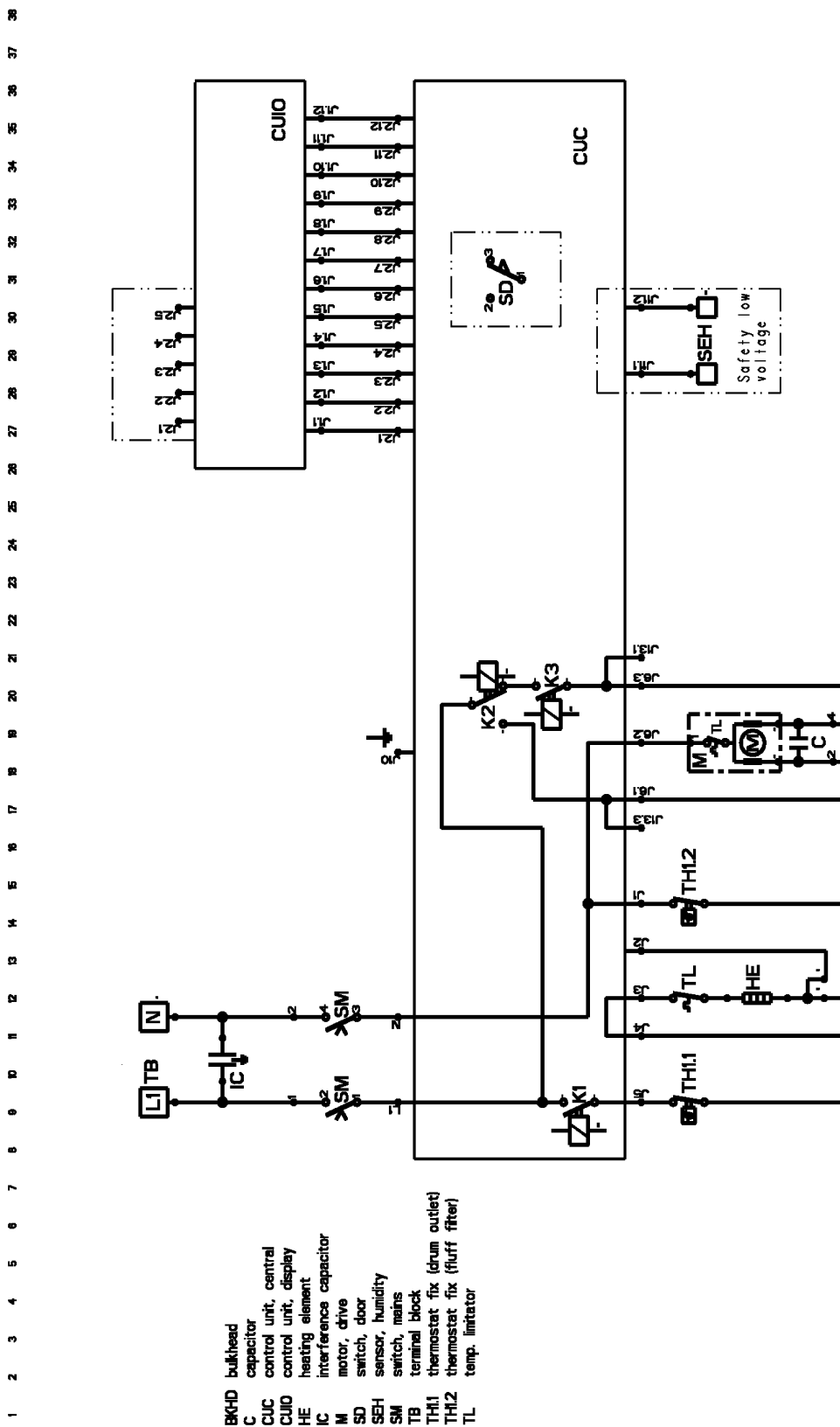
Anschlußplan



00 black
11 brown
22 red
33 orange
44 yellow
55 green
66 blue
77 violet
88 grey
99 white
28 pink

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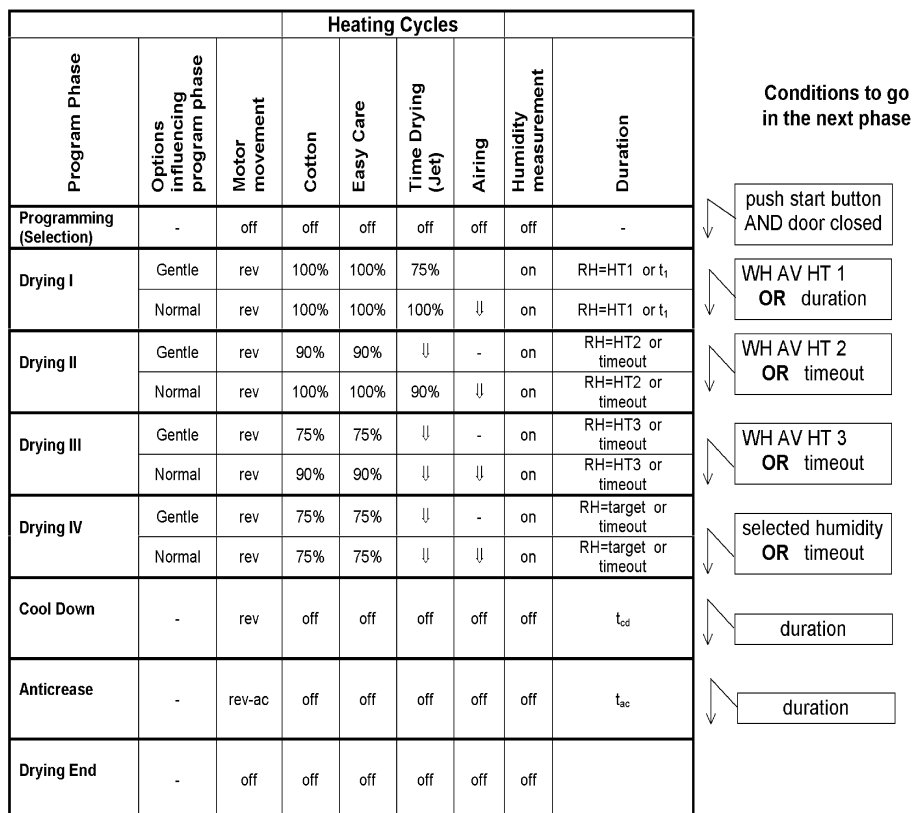
Stromlaufplan



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Text /Legende

Program Flow for WH AV (Airvented)



Humidity Targets	
HT1	RH=22 %
HT2	RH=22 %
HT3	RH=15 %
selected humidity	RH= selected program target

Reversing type	off (sec)	cw (sec)	off (sec)	ccw (sec)
rev	2	80	2	6
rev-ac	2	80	2	6

Duration	
t ₁	60 min Cotton / 20 min Easy Care
timeout	60 min
t _{cd}	6 min
t _{ac}	60 min

Heater cycles	Heater on	Heater off
100%	180 sec	0 sec
90%	162 sec	18 sec
75%	136 sec	44 sec

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Text /Legende

Program flow WH CD WCT and WH CD WCB (Condenser)

			Heating Cycles					
Program Phase	Options influencing program phase	Motor movement	Cotton	Easy Care	Time Drying Jet)	Airing	Humidity measurement	Duration
Programming (Selection)	-	off	off	off	off	off	off	-
Drying I	Gentle	rev	100%	100%	78%		on	RH=HT1 or t _i
	Normal	rev	100%	100%	100%	⇓	on	RH=HT1 or t _i
Drying II	Gentle	rev	90%	90%	⇓	-	on	RH=HT2 or timeout
	Normal	rev	100%	100%	90%	⇓	on	RH=HT2 or timeout
Drying III	Gentle	rev	78%	78%	⇓	-	on	RH=HT3 or timeout
	Normal	rev	90%	83%	⇓	⇓	on	RH=HT3 or timeout
Drying IV	Gentle	rev	67%	67%	⇓	-	on	RH=target or timeout
	Normal	rev	78%	67%	⇓	⇓	on	RH=target or timeout
Cool Down	-	rev	off	off	off	off	off	t _{cd}
Anticrease	-	rev-ac	off	off	off	off	off	t _{ac}
Drying End	-	off	off	off	off	off	off	

Conditions to go in the next phase

push start button
AND door closed

WH CD HT 1
OR duration

WH CD HT 2
OR timeout

WH CD HT 3
OR timeout

selected humidity
OR timeout

duration

duration

WH = Whirlpool, CD = Condense Dryer, WCT = Water Container Top,
WCB = Water Container Bottom

Humidity Targets	
HT1	RH=22 %
HT2	RH=22 %
HT3	RH=15 %
selected humidity	RH= selected program target

Reversing type	off (sec)	cw (sec)	off (sec)	ccw (sec)
rev	2	80	2	6
rev-ac	2	80	2	6

Duration	
t ₁	60 min Cotton / 20 min Easy Care
timeout	60 min
t _{cd}	12 min, 9min for 20min jet program
t _{ac}	60 min

Heater cycles	Heater on	Heater off
100%	180 sec	0 sec
90%	162 sec	18 sec
83%	150 sec	30 sec
78%	140 sec	40 sec
67%	121 sec	59 sec

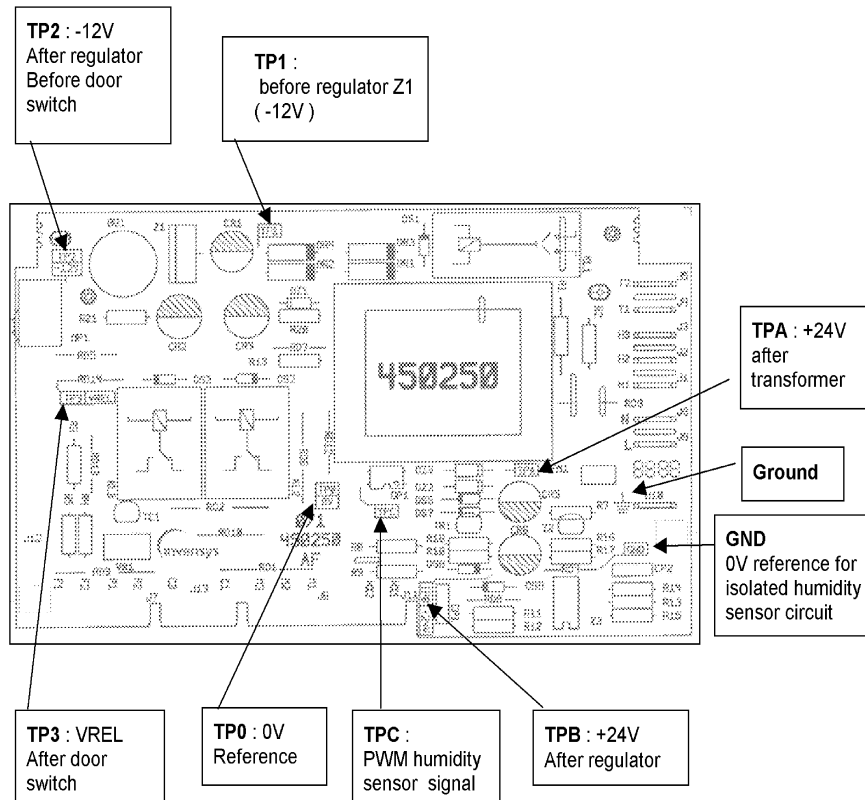
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Text /Legende

Testpoints at power board

Alphatronic WH

WH AV (AIR VENTED), WH CD WCT and WH CD WCB (CONDENSER)



- TP0: reference for -12V circuit (RD6)
 TP1: -12V after transformer, unregulated (DR4)
 TP2: -12V regulated (MP1)
 TP3: -12V regulated if door closed (RD14)
 -1,1V if door opened
- GND: reference for class II isolated humidity sensor circuit (RD4)
 TPA: +24V after transformer, unregulated (DZ3)
 TPB: +24V regulated (DS8)
 TPC: PWM signal of humidity sensor (OP1)

WH = Whirlpool, CD = Condense Dryer, AV = Airvented,
 WCT = Water Container Top, WCB = Water Container Bottom

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Text /Legende

Test programs

The TEST MODE delivers the possibility to check several functions of the dryer independently of the normal drying programs.

Entering the Test Mode

- a) Close door of the dryer or block door switch
- b) Rotate program selector to position „Airing“
- c) Press and release option button „Gentle“ three times within 6 sec. (If accidentally the button is pushed more than three times, this will have no negative impact. The test mode will start in step1 anyway)

If the sequence a) - c) is correct: =>Test Mode basic signal is displayed (see Test mode display)and Step1 of test program is executed.

Advance to next step

Push OPT2: "Buzzer"

Leaving the Test Mode

The TEST MODE is terminated by:

- Push Start Button
- OR
- Interrupt of the mains supply for a time of 40 sec.

- OR
- Open door
- OR
- Turn rotary selector
- OR
- Last step of test program is reached and button OPT2 is pushed once more

Test mode display

When test mode is entered:

LED group:	Behaviour:
Program sequence LEDs (PS2...PS5)	Indication of test step acc. table 'indication'
Buzzer	Beeps when button OPT1 („Gentle“) is pushed

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Text /Legende

Indication

Indicator	Test Program Step								
	Step1>>	Step2>>	Step3>>	Step4>>	Step5>>	Step6>>	Step7>>	Step8>>	Step9
LED PS2 (Overdry Protection)	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON
LED PS3 (Drying)	ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON
LED PS4 (End)	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
LED PS5 (Anticrease)	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON

After sales service test program

The test program works sequentially, that means the change from one program step to the next has to be done only by request of pushing the OPT2 button!

Test Program Step No.	Test/Tested Component	Description	
Step 1**	Factory Test Program 1	Motor: ON, short reversing rev-x Heating Element: ON, cycle heat-x Display and Button Test: ON Humidity Input Test/float: ON	Test Mode is entered
Step 2**	Factory Test Program 2	Motor: ON, long reversing rev-y Heating Element: ON, cycle heat-y Display and Button Test**: ON Humidity Input Test/float**: ON	Push OPT2 button
Step 3	Pump & Float Switch	WH CD WCT: 1) Fill in water untill float switch is switched. 2) Container LED is switched ON and pump is switched ON WH CD WCB: 1) Pull out container (switch switches) 2) Container LED is switched ON WH AV: skip this test step manually!	Push OPT2 button
Step 4	Motor CCW	Motor: ON, ccw Heating Element: OFF	Push OPT2 button
Step 5	Motor CW	Motor: ON, cw Heating Element: OFF	Push OPT2 button
Step 6	Heating Element Full Power	Heating Element: ON, 100% Motor: ON, cw	Push OPT2 button
Step 7	Heating Element Reduced Power	Heating Element: ON, 78% Motor: ON, cw	Push OPT2 button
Step 8**	Humidity Input	Description see below	Push OPT2 button
Step 9	Display last failure/error code	Last error/failure code is displayed	Push OPT2 button
EXIT	Leave Test Mode	Go to Programming phase (Selection)	

**Description see below

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Text /Legende

Heating and Reversing Cycle for Factory Test Program 1 (Step1) :

Dryer Type	Heating Element heat-x		Motor rev-x			
	Heater ON	Heater OFF	CW ON	OFF	CCW ON	OFF
Condenser	12 sec	0 sec	4 sec	2 sec	4 sec	2 sec
Airvented	11 sec	0 sec	3 sec	2 sec	4 sec	2 sec

Heating and Reversing Cycle for Factory Test Program 2 (Step2):

Dryer Type	Heating Element heat-y		Motor rev-y			
	Heater ON	Heater OFF	CW ON	OFF	CCW ON	OFF
Condenser	26 sec	0 sec	10 sec	3 sec	10 sec	3 sec
Airvented	21 sec	0 sec	10 sec	3 sec	5 sec	3 sec

Humidity Measurement Test

Max. Duration: no limit

Description:

- Test is active during Steps 1+2 and Step8
- Resistors have to be connected at the humidity sensor
- Door must be closed or door switch blocked (otherwise 24V power supply off)
- LEDs indicates measured humidity level due to following table:

Resistances	LED OPT1 ("Gentle")	LED Failure 2 ("Fluff Filter")
250 kOhm	ON	OFF
1130 kOhm	ON	ON
3700 kOhm	OFF	ON
open circuit	OFF	OFF

Display and Button test

Description:

- Test is active during all test steps.
- If option buttons are pushed LEDs are switched on and off. (exception: OPT1 button ,Gentle', this button is used for humidity measurement)

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