ELECTRICAL

Insulation Resistance Per IEC 309-1, Clause 19	500V for 1 min. Resistance ≥ 5MΩ
Dielectric Strength Per IEC 309-1, Clause 19	3000V for 1 min.
Norm. Operation, Connect & Disconnect Cycles Per IEC 309-1, Clause 21	See Table 1
Breaking Capacity Per IEC 309-1, Clause 20	Tested at 110 % of the rated operating voltage and 125% of the rated current.
Temperature Rise Per IEC 309-1, Clause 22	Maximum 50 K rise at full rated current.

MECHANICAL

Cable Secureness Per IEC 309, Clause 23	See Table 2
Impact Per IEC 309, Clause 24	A device is wired with a 2.25m length of flexible cord and dropped from a height of 75 cm, 8 times. The device is then tested for applicable degrees of protection against moisture.

ENVIRONMENTAL

Flammability	Self-extinguishing Per IEC 309-1, Clause 27
Ambient Temperature Range	Minimum: -25°C with impact Maximum: 90°C
Moisture Resistance	Watertight (IP67): Device immersed for 24 hours in water at a temp. of 25°C, the highest point of the device being 5cm (2") below the water level. Splashproof (IP44): Device is sprayed with water for 10 minutes and immediately afterwards subjected to splashing water in all directions (360°).
UV Resistance	Exposed plastic materials are UV stabilized.

CE

DECLARATION OF CONFORMITY

WALTHER WERKE, Ferdinand Walther GmbH
Ramsener Strasse 6
67304 Eisenberg

We declare, under our sole responsibility, the conformity of the following products and standards:

Plugs and Sockets (Pin and Sleeve devices)
DIN EN 60 309, T. 1/BS 4343
DIN EN 60 309, T. 2

This declaration of conformity is according to the EC regulations 73/23, 91/368 and 89/336 (Low Voltage Directive), module A, in consideration of DIN EN 45 014.

TABLE 1

Connect and Disconnect Cycles			
Device Rating Amperes	Cycles with Load at Rated Current and Voltage	No-Load Cycles	Sequence
16	5000 p.f of 0.6	0	-
32	1000 p.f of 0.6	1000	Alternating
63	1000 p.f of 0.6	1000	Alternating
125	250 p.f of 0.7	250	Alternating

The test sequence is conducted by using a no-load, followed by a load sequence.

TABLE 2

Cable Secureness Test			
Device Rating Amperes	Force	Torque	Maximum Displacement
	N	N•m	mm
16	80	0.350	2
32	100	0.425	2
63	120	0.8	2
125	200	1.5	2

The flexible cord or cable is twisted and pulled. Values for the applied twisting torque and force of pull are shown in Table 2. In all cases the cord displacement is less than 2mm.

Norway Germany Finland Switzerland
Austria Sweden Belgium Denmark Italy
Netherlands Czechoslovakia Hungary Russia
United States Canada

DIN EN ISO 9001 Certificate Registration No. 4678-01

MALE PLUGS

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67)	SPLASHPROOF (IP44) with cable gland	SPLASHPROOF (IP44) with cable sleeve	SPLASHPROOF (IP44) Angled 90°
3	2P + G	110	4	219304	211304	210304	216304
		230	6	219306	211306	210306	216306
		400	9	219309	211309	210309	216309
4	3P + G	110	4	219404	211404	210404	216404
		230	9	219409	211409	210409	216409
		400	6	219406	211406	210406	216406
		440	11	219411	211411	210411	216411
		500	7	219407	211407	210407	216407
		>50 (100-300Hz)	10	219410	211410	210410	216410
		>50 (300-500Hz)	2	219402	211402	210402	216402
5	3P + N + G	110	4	219504	211504	210504	216504
		230	9	219509	211509	210509	216509
		400	6	219	211	210	216
		440	11	219511	211511	210511	216511
7	6P + G	400	6		211706	210706	

FEMALE CONNECTORS (Couplers)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67)	SPLASHPROOF (IP44) with cable gland	SPLASHPROOF (IP44) with cable sleeve	SPLASHPROOF (IP44) Angled 90°
3	2P + G	110	4	319304	311304	310304	316304
		230	6	319306	311306	310306	316306
		400	9	319309	311309	310309	316309
4	3P + G	110	4	319404	311404	310404	
		230	9	319409	311409	310409	
		400	6	319406	311406	310406	
		440	11	319411	311411	310411	
		500	7	319407	311407	310407	
		>50 (100-300Hz)	10	319410	311410	310410	
		>50 (300-500Hz)	2	319402	311402	310402	
5	3P + N + G	110	4	319504	311504	310504	
		230	9	319509	311509	310509	
		400	6	319	311	310	
		440	11	319511	311511	310511	
7	6P + G	400	6		311706	310706	

FEMALE PANEL MOUNTED SOCKET-OUTLET

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) Straight	WATERTIGHT (IP67) Angled 15°	WATERTIGHT (IP67) Angled 80°	SPLASHPROOF (IP44) Straight	SPLASHPROOF (IP44) Angled 15°	SPLASHPROOF (IP44) Angled 80°
3	2P + G	110	4	419304	519304	518304	410304	510304	514304
		230	6	419306	519306	518306	410306	510306	514306
		400	9	419309	519309	518309	410309	510309	514309
4	3P + G	110	4	419404	519404	518404	410404	510404	514404
		230	9	419409	519409	518409	410409	510409	514409
		400	6	419406	519406	518406	410406	510406	514406
		440	11	419411	519411	518411	410411	510411	514411
		500	7	419407	519407	518407	410407	510407	514407
		>50 (100-300Hz)	10	419410	519410	518410	410410	510410	514410
		>50 (300-500Hz)	2	419402	519402	518402	410402	510402	514402
5	3P + N + G	110	4	419504	519504	518504	410504	510504	514504
		230	9	419509	519509	518509	410509	510509	514509
		400	6	419	519	518	410	510	514
		440	11	419511	519511	518511	410511	510511	514511
7	6P + G	400	6				411706		514706

Note: See page 28 for surface mount socket-outlets.

MALE APPLIANCE PLUG (Inlet)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) Angled 80°	WATERTIGHT (IP67) Surface Mount	SPLASHPROOF (IP44) Straight	SPLASHPROOF (IP44) Angled 80°	SPLASHPROOF (IP44) Surface Mount External Mounting	SPLASHPROOF (IP44) Surface Mount Internal Mounting
3	2P + G	110	4	619304	618304	615304	611304	610304	
		230	6	619306	618306	615306	611306	610306	
		400	9	619309	618309	615309	611309	610309	
4	3P + G	110	4	619404	618404	615404	611404	610404	616404
		230	9	619409	618409	615409	611409	610409	616409
		400	6	619406	618406	615406	611406	610406	616406
		440	11	619411	618411	615411	611411	610411	616411
		500	7	619407	618407	615407	611407	610407	616407
		>50 (100-300Hz)	10	619410	618410	615410	611410	610410	616410
		>50 (300-500Hz)	2	619402	618402	615402	611402	610402	616402
5	3P + N + G	110	4	619504	618504	615504	611504	610504	616504
		230	9	619509	618509	615509	611509	610509	616509
		400	6	619	618	615	611	610	616
		440	11	619511	618511	615511	611511	610511	616511
7	6P + G	400	6			615706	611706	610706	616706

MALE PLUGS

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67)	SPLASHPROOF (IP44) with cable gland	SPLASHPROOF (IP44) with cable sleeve	SPLASHPROOF (IP44) Angled 90°
3	2P + G	110	4	239304	231304	230304	236304
		230	6	239306	231306	230306	236306
		400	9	239309	231309	230309	236309
4	3P + G	110	4	239404	231404	230404	236404
		230	9	239409	231409	230409	236409
		400	6	239406	231406	230406	236406
		380/440*	3	239403*			
		440	11	239411	231411	230411	236411
		500	7	239407	231407	230407	236407
		>50 (100-300Hz)	10	239410	231410	230410	236410
		>50 (300-500Hz)	2	239402	231402	230402	236402
5	3P + N + G	110	4	239504	231504	230504	236504
		230	9	239509	231509	230509	236509
		400	6	239	231	230	236
		440	11	239511	231511	230511	236511
7	6P + G	400	6		231706	230706	

FEMALE CONNECTORS (Couplers)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67)	SPLASHPROOF (IP44) with cable gland	SPLASHPROOF (IP44) with cable sleeve
3	2P + G	110	4	339304	331304	330304
		230	6	339306	331306	330306
		400	9	339309	331309	330309
4	3P + G	110	4	339404	331404	330404
		230	9	339409	331409	330409
		400	6	339406	331406	330406
		380/440*	3	339403*		
		440	11	339411	331411	330411
		500	7	339407	331407	330407
		>50 (100/300Hz)	10	339410	331410	330410
		>50 (300/500Hz)	2	339402	331402	330402
5	3P + N + G	110	4	339504	331504	330504
		230	9	339509	331509	330509
		400	6	339	331	330
		440	11	339511	331511	330511
7	6P + G	400	6		331706	330706

* Only for refrigerated containers.

FEMALE PANEL MOUNTED SOCKET-OUTLET

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) Straight	WATERTIGHT (IP67) Angled 15°	WATERTIGHT (IP67) Angled 80°	SPLASHPROOF (IP44) Straight	SPLASHPROOF (IP44) Angled 15°	SPLASHPROOF (IP44) Angled 80°
3	2P + G	110	4	439304	539304	538304	430304	530304	534304
		230	6	439306	539306	538306	430306	530306	534306
		400	9	439309	539309	538309	430309	530309	534309
4	3P + G	110	4	439404	539404	538404	430404	530404	534404
		230	9	439409	539409	538409	430409	530409	534409
		400	6	439406	539406	538406	430406	530406	534406
		380/440*	3	439403*					
		440	11	439411	539411	538411	430411	530411	534411
		500	7	439407	539407	538407	430407	530407	534407
		>50 (100-300Hz)	10	439410	539410	538410	430410	530410	534410
		>50 (300-500Hz)	2	439402	539402	538402	430402	530402	534402
5	3P + N + G	110	4	439504	539504	538504	430504	530504	534504
		230	9	439509	539509	538509	430509	530509	534509
		400	6	439	539	538	430	530	534
		440	11	439511	539511	538511	430511	530511	534511
7	6P + G	400	6				431706		534706

Note: See page 28 for surface mount socket-outlets.

MALE APPLIANCE PLUG (Inlet)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) Angled 80°	WATERTIGHT (IP67) Surface Mount	SPLASHPROOF (IP44) Straight	SPLASHPROOF (IP44) Angled 80°	SPLASHPROOF (IP44) Surface Mount External Mounting	SPLASHPROOF (IP44) Surface Mount Internal Mounting
3	2P + G	110	4	639304	638304	635304	631304	630304	636304
		230	6	639306	638306	635306	631306	630306	636306
		400	9	639309	638309	635309	631309	630309	636309
4	3P + G	110	4	639404	638404	635404	631404	630404	636404
		230	9	639409	638409	635409	631409	630409	636409
		400	6	639406	638406	635406	631406	630406	636406
		380/440*	3	639403*	638403*				
		440	11	639411	638411	635411	631411	630411	636411
		500	7	639407	638407	635407	631407	630407	636407
		>50 (100-300Hz)	10	639410	638410	635410	631410	630410	636410
		>50 (300-500Hz)	2	639402	638402	635402	631402	630402	636402
5	3P + N + G	110	4	639504	638504	635504	631504	630504	636504
		230	9	639509	638509	635509	631509	630509	636509
		400	6	639	638	635	631	630	636
		440	11	639511	638511	635511	631511	630511	636511
7	6P + G	400	6			635706	631706	630706	636706

* Only for refrigerated containers.

MALE PLUGS

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67)	SPLASHPROOF (IP44) with cable gland	SPLASHPROOF (IP44) with cable sleeve
3	2P + G	110	4	269304	261304	260304
		230	6	269306	261306	260306
		400	9	269309	261309	260309
4	3P + G	110	4	269404	261404	260404
		230	9	269409	261409	260409
		400	6	269406	261406	260406
		440	11	269411	261411	260411
		500	7	269407	261407	260407
5	3P + N + G	110	4	269504	261504	260504
		230	9	269509	261509	260509
		400	6	269	261	260
		440	11	269511	261511	260511

FEMALE CONNECTORS (Couplers)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67)	SPLASHPROOF (IP44) with cable gland	SPLASHPROOF (IP44) with cable sleeve
3	2P + G	110	4	369304	361304	360304
		230	6	369306	361306	360306
		400	9	369309	361309	360309
4	3P + G	110	4	369404	361404	360404
		230	9	369409	361409	360409
		400	6	369406	361406	360406
		440	11	369411	361411	360411
		500	7	369407	361407	360407
5	3P + N + G	110	4	369504	361504	360504
		230	9	369509	361509	360509
		400	6	369	361	360
		440	11	369511	361511	360511

FEMALE PANEL MOUNTED SOCKET-OUTLET

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) Straight	WATERTIGHT (IP67) Angled 15°	WATERTIGHT (IP67) Angled 80°	SPLASHPROOF (IP44) Straight	SPLASHPROOF (IP44) Angled 15°	SPLASHPROOF (IP44) Angled 80°
3	2P + G	110	4	469304	569304	568304	460304	560304	564304
		230	6	469306	569306	568306	460306	560306	564306
		400	9	469309	569309	568309	460309	560309	564309
4	3P + G	110	4	469404	569404	568404	460404	560404	564404
		230	9	469409	569409	568409	460409	560409	564409
		400	6	469406	569406	568406	460406	560406	564406
		440	11	469411	569411	568411	460411	560411	564411
		500	7	469407	569407	568407	460407	560407	564407
5	3P + N + G	110	4	469504	569504	568504	460504	560504	564504
		230	9	469509	569509	568509	460509	560509	564509
		400	6	469	569	568	460	560	564
		440	11	469511	569511	568511	460511	560511	564511

Note: See page 28 for surface mount receptacles.

MALE APPLIANCE PLUG (Inlet)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) Angled 80°	WATERTIGHT (IP67) Surface Mount	SPLASHPROOF (IP44) Straight	SPLASHPROOF (IP44) Angled 80°
3	2P + G	110	4	669304	668304		661304
		230	6	669306	668306		661306
		400	9	669309	668309		661309
4	3P + G	110	4	669404	668404		661404
		230	9	669409	668409		661409
		400	6	669406	668406		661406
		440	11	669411	668411		661411
		500	7	669407	668407		661407
5	3P + N + G	110	4	669504	668504	665504	661504
		230	9	669509	668509	665509	661509
		400	6	669	668	665	661
		440	11	669511	668511	665511	661511

MALE PLUGS

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67)
3	2P + G	110	4	279304
		230	6	279306
		400	9	279309
4	3P + G	110	4	279404
		230	9	279409
		400	6	279406
		440	11	279411
		500	7	279407
5	3P + N + G	110	4	279504
		230	9	279509
		400	6	279
		440	11	279511

FEMALE CONNECTORS (Couplers)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67)
3	2P + G	110	4	379304
		230	6	379306
		400	9	379309
4	3P + G	110	4	379404
		230	9	379409
		400	6	379406
		440	11	379411
		500	7	379407
5	3P + N + G	110	4	379504
		230	9	379509
		400	6	379
		440	11	379511

FEMALE PANEL MOUNTED SOCKET-OUTLET

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) Straight	WATERTIGHT (IP67) Angled 15°
3	2P + G	110	4	479304	579304
		230	6	479306	579306
		400	9	479309	579309
4	3P + G	110	4	479404	579404
		230	9	479409	579409
		400	6	479406	579406
		440	11	479411	579411
		500	7	479407	579407
5	3P + N + G	110	4	479504	579504
		230	9	479509	579509
		400	6	479	579
		440	11	479511	579511

Note: See page 28 for surface mount receptacles.

MALE APPLIANCE PLUG (Inlet)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) Straight	WATERTIGHT (IP67) Surface Mount
3	2P + G	110	4	679304	678304
		230	6	679306	678306
		400	9	679309	678309
4	3P + G	110	4	679404	678404
		230	9	679409	678409
		400	6	679406	678406
		440	11	679411	678411
		500	7	679407	678407
5	3P + N + G	110	4	679504	678504
		230	9	679509	678509
		400	6	679	678
		440	11	679511	678511

SURFACE MOUNT SOCKET-OUTLETS (Internal Mounting)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	WATERTIGHT (IP67) 16 Amps	WATERTIGHT (IP67) 32 Amps	WATERTIGHT (IP67) 63 Amps	WATERTIGHT (IP67) 125 Amps	SPLASHPROOF (IP44) 16 Amps	SPLASHPROOF (IP44) 32 Amps	SPLASHPROOF (IP44) 63 Amps
3	2P + G	110	4	119304	139304		179304	111304	131304	
		230	6	119306	139306		179306	111306	131306	
		400	9	119309	139309		179309	111309	131309	
4	3P + G	110	4	119404	139404	169404	179404	111404	131404	161404
		230	9	119409	139409	169409	179409	111409	131409	161409
		400	6	119406	139406	169406	179406	111406	131406	161406
		440	11	119411	139411	169411	179411	111411	131411	161411
		500	7	119407	139407	169407	179407	111407	131407	161407
		>50 (100-300Hz)	10	119410	139410	169410	179410	111410	131410	161410
		>50 (300-500Hz)	2	119402	139402	169402	179402	111402	131402	161402
5	3P + N + G	110	4	119504	139504	169504	179504	111504	131504	161504
		230	9	119509	139509	169509	179509	111509	131509	161509
		400	6	119	139	169	179	111	131	161
		440	11	119511	139511	169511	179511	111511	131511	161511
7	6P + G	400	6					111706	131706	

SURFACE MOUNT SOCKET-OUTLETS (External Mounting)

	No. of Wires	Voltage AC	Clock Position of Ground Contact	SPLASHPROOF (IP44) 16 Amps	SPLASHPROOF (IP44) 32 Amps
3	2P + G	110	4	110304	130304
		230	6	110306	130306
		400	9	110309	130309
4	3P + G	110	4	110404	130404
		230	9	110409	130409
		400	6	110406	130406
		440	11	110411	130411
		500	7	110407	130407
		>50 (100-300Hz)	10	110410	130410
		>50 (300-500Hz)	2	110402	130402
5	3P + N + G	110	4	110504	130504
		230	9	110509	130509
		400	6	110	130
		440	11	110511	130511
7	6P + G	400	6	110706	130706