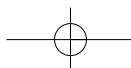




TRANSFORMERS, INDUCTORS, POWER SUPPLY UNITS

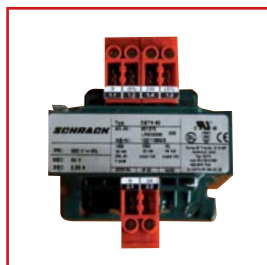
CONTENTS

TRANSFORMERS.....	Page 354
POWER SUPPLY UNITS	Page 357



TRANSFORMERS

CONTROL-, ISOLATING- AND SAFETY TRANSFORMERS



LP602006I

SCHRACK-INFO

- EN 61 558
- Taps, primary side $\pm 5\%$
- Finger-proof terminals according to VBG4
- Temperature class T 40/E
- Frequency 50/60 Hz
- Primary voltages: 400 V or 230 V, others upon request
- Secondary voltages: 230 V, 24 V, or 12 V, others upon request
- With optional fuse: LP 61....
- Optional snap-on fastening for DIN rail mounting (up to 200 VA): LP699001

OVERVIEW TABLE

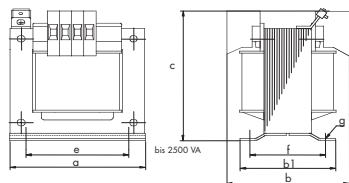
POWER RATING VA	400/230	400/24	230/230	230/24	230/12
30	-	LP603003	-	LP602003	LP601003
40	-	-	-	-	-
50	-	-	-	-	-
63	LP604006	-	-	LP602006	LP601006
100	LP604010	LP603010	LP605010	LP602010	LP601010
160	LP604016	LP603016	-	LP602016	LP601016
200	LP604020	LP603020	-	LP602020	LP601020
250	LP604025	LP603025	LP605025	LP602025	-
320	LP604032	-	-	LP602032	-
400	LP604040	LP603040	-	LP602040	LP601032
500	LP604050	LP603050	LP605050	LP602050	LP601050
630	LP604063	-	-	LP602063	-
700	-	-	-	-	-
800	-	-	LP605080	LP602080	-
1000	LP604100	-	LP605100	LP602100	-

TRANSFORMERS

■ SINGLE PHASE CONTROL TRANSFORMERS



LP612006



■ CERTIFICATIONS

EN 61 558

■ SCHRACK-INFO

- Primary voltage 400 V, others upon request
- Secondary voltage 230 V, others upon request
- With optional fuse: ... secondary (SIS)
- All transformers with a secondary voltage < 50 V have been designed and are labelled as safety transformers.
- No package screws, fastening holes freely accessible

Typ	P rated VA	a	b	c e Dimensions in mm		f	g	Weight-kg
LP60x003	30	66	84	79	50	44	4,8	0,7
LP60x006	60	78	88	88	56	48	4,8	1,1
LP60x010	100	84	106	93	64	64	4,8	2
LP60x016	160	96	106	104	84	73	5,8	2,7
LP60x025	250	96	120	104	84	86	5,8	3,5
LP60x032	320	120	104	121	90	74	5,8	4
LP60x040	400	120	116	121	90	85	5,8	5,2
LP60x050	500	120	158	131	90	104	5,8	6,8
LP60x063	630	150	134	153	122	90	7	7,8
LP60x080	800	150	150	153	122	106	7	9,5
LP60x100	1000	150	176	153	122	130	7	12,9
LP60x130	1300	174	160	169	135	112	7	14
LP60x160	1600	174	180	169	135	142	7	18,5
LP60x200	2000	192	168	181	140	122	10	22,5
LP60x250	2500	192	190	181	140	144	10	24,6

DESCRIPTION	ORDER NO.
230/12 V	
230/12 V 30 VA	LP601003T
230/12 V 60 VA	LP601006T
230/12 V 100 VA	LP601010T
230/12 V 160 VA	LP601016T
230/12 V 200 VA	LP601020T
230/12 V 315 VA	LP601032T
230/12 V 500 VA	LP601050T
230/24 V	
230/24 V 30 VA	LP602003I
230/24 V 60 VA	LP602006I
230/24 V 100 VA	LP602010I
230/24 V 160 VA	LP602016I
230/24 V 250 VA	LP602025I
230/24 V 315 VA	LP602032I
230/24 V 400 VA	LP602040I
230/24 V 500 VA	LP602050I
230/24 V 630 VA	LP602063I
230/24 V 800 VA	LP602080I
230/24 V 1000 VA	LP602100I
400/24 V	
400/24 V 30 VA	LP603003I
400/24 V 100 VA	LP603010I
400/24 V 160 VA	LP603016I
400/24 V 250 VA	LP603025I
400/24 V 400 VA	LP603040I
400/24 V 500 VA	LP603050I

TRANSFORMERS

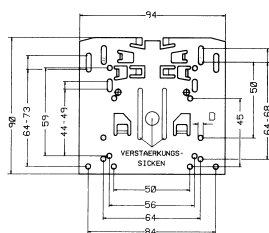
■ SINGLE PHASE CONTROL TRANSFORMERS – continued

DESCRIPTION	ORDER NO.
400/230 V	
400/230 V 60 VA	LP604006I
400/230 V 100 VA	LP604010I
400/230 V 160 VA	LP604016I
400/230 V 250 VA	LP604025I
400/230 V 320 VA	LP604032I
400/230 V 400 VA	LP604040I
400/230 V 500 VA	LP604050I
400/230 V 630 VA	LP604063I
400/230 V 1000 VA	LP604100I
400/230 V 1600 VA	LP604160I
400/230 V 2000 VA	LP604200I
400/230 V 2500 VA	LP604250I
400/230 V 3000 VA	LP604300I
400/230 V 4000 VA	LP604400T
230/230 V	
230/230 V 100 VA	LP605010I
230/230 V 250 VA	LP605025I
230/230 V 500 VA	LP605050I
230/230 V 800 VA	LP605080I
230/230 V 1000 VA	LP605100I
230/230 V 1300 VA	LP605130T
230/230 V 2000 VA	LP605200T
230/230 V 2500 VA	LP605250T
230/24 V	
230/24 V 30 VA sec. fuse	LP612003T
230/24 V 60 VA sec. fuse	LP612006T
230/24 V 100 VA sec. fuse	LP612010T
230/24 V 200 VA sec. fuse	LP612020T
230/24 V 250 VA sec. fuse	LP612025T

■ MOUNTING PLATE



LP699001T



■ SCHRACK-INFO

- Steel zinkplated

DESCRIPTION	ORDER NO.
Mounting plate 30 – 160 VA	LP699001T

POWER SUPPLY UNITS

STABILISED POWER SUPPLIES, INSTALLATION DESIGN TYPE



LP746101

CERTIFICATIONS

EN 60742

SCHRACK-INFO

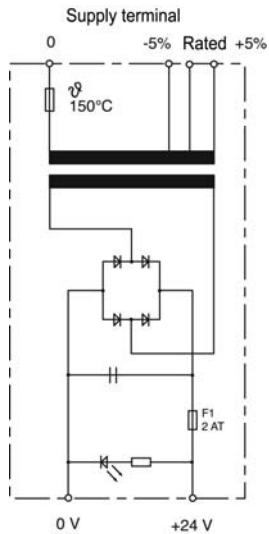
- Supply voltage: 230 V AC
- Frequency range: 48-63 Hz
- Output voltage: 12 V DC or 24 V DC
- Power loss: 4 VA
- Storage temperature: -20 °C to +60 °C
- Ambient operating temperature: -20 °C to +40 °C
- Test voltage: 4 kV
- Degree of protection: IP 20
- Terminals: 2.5 mm²

OUTPUT CURRENT/MAX. POWER OUTPUT/ OUTPUT VOLTAGE	DIM. (WxHxD) mm	ORDER NO.
1,25 A/30 W/24 V DC	51x90x65	LP746101
2,5 A/30 W/12 V DC	51x90x65	LP7431C2

UNSTABILISED SINGLE-PHASE DC SUPPLY FULLY ENCAPSULATED, 1,5 TO 10 A



LP7331031



SCHRACK-INFO

- Taps, primary side ± 5%
- Input voltage 230 V 50/60 Hz, others upon request
- Output voltage 24 V DC according to EN 61558 & EN 61131, Other voltages upon request
- Residual ripple < 5%
- Primary protection: thermal release, secondary side: replaceable fuse
- Self-cooling
- LED function display
- With double insulation
- Operating temperature: -25 °C to +40 °C
- Storage temperature: -25 °C to +65 °C

CERTIFICATIONS

EN 60742 T2-6

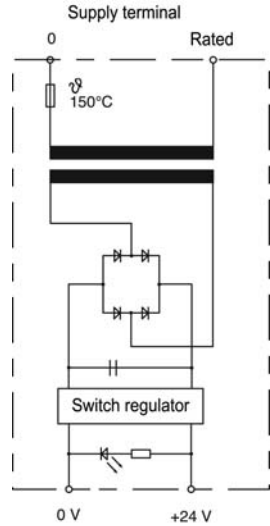
DESCRIPTION	DIM. (WxHxD) mm	ORDER NO.
230/24 V DC		
230/24 V 1,5 A unregulated	121x100x77	LP7331B11
230/24 V 3 A unregulated	133x108x89	LP7331031
230/24 V 5 A unregulated	133x121x89	LP7331051
230/24 V 10 A unregulated	172x152x110	LP7331101
400/24 V DC		
400/24 V 3 A unregulated	133x108x89	LP7341031
400/24 V 5 A unregulated	133x121x89	LP7341051

POWER SUPPLY UNITS

STABILISED SINGLE-PHASE DC SUPPLY FULLY ENCAPSULATED, 1,5 TO 5 A

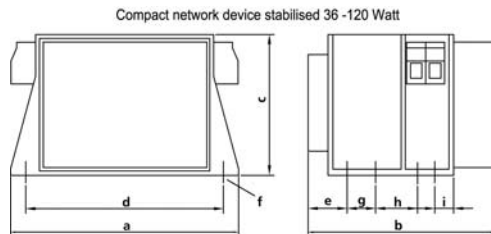


LP7231B1



SCHRACK-INFO

- Stabilised supply voltage and current
- Input range from 0,9 U_n to 1,1 U_n
- Input voltage 230 V 50/60 Hz or input voltage 400 V 50/60 Hz, others upon request
- Output voltage 24 V DC according to EN 61 558 / EN 61 131
- Residual ripple < 150 m Vpp
- Thermal release on primary side; electronic current limiter on secondary side
- With double insulation
- LED function display
- Short-circuit and tamper-proof
- Self-cooling
- Operating temperature: -25 °C to +40 °C
- Storage temperature: -25 °C to +65 °C



Size	a	b	c	d	e	f	g	h	i
5,0 A	172	170	107	150	30	ø8,5	85	---	---
3,0 A	133	124	89	105	24	ø5,4x10	16,5	17,5	16,5
1,5 A	121	117	77	103	22	ø5,4x10	15	30	---

CERTIFICATIONS

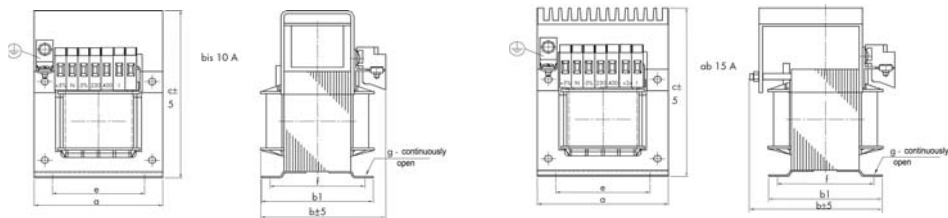
EN 60,742 T2-6

DESCRIPTION	DIM. (WxHxD) MM	ORDER NO.
230/24 V 1,5 A stabilised	121x117x77	LP7231B1I
230/24 V 3 A stabilised	133x124x89	LP723103I
230/24 V 5 A stabilised	172x170x107	LP723105I

SINGLE-PHASE DC SUPPLY, FILTERED OUTPUT UP TO 25 A



LP702110



SCHRACK-INFO

- Output voltage 24 V DC according to DIN 19240
- Residual ripple < 5%
- Self-cooling
- Taps, primary side ± 5%

CERTIFICATIONS

EN 61 558

POWER SUPPLY UNITS

■ SINGLE-PHASE DC SUPPLY, FILTERED OUTPUT UP TO 25 A – continued

Typ	Current A/ DC	a	b	c		d	e	f	Weight-kg
Dimensions in mm									
LP7021B1	1,5	78	68	123	56	47,5	M4	1,5	
LP702103	3	84	85	125	64	65	M4	2,1	
LP702105	6	96	92	135	84	75	M5	3,1	
LP702108	8	105	105	145	80	86	M5	4,3	
LP702110	11	120	113	165	90	94	M5	6,1	
LP702115	18	135	135	185	104	106	M5	9,1	
LP702125	25	151	147	248	122	125	7x13	14,8	

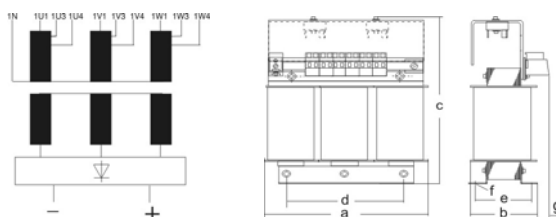
■ 230/400 V 50/60 Hz

DESCRIPTION	DIM. (WxHxD) mm	ORDER NO.
230-400/24 V 1,5 A	78x123x68	LP7021B1I
230-400/24 V 3 A	84x125x85	LP702103I
230-400/24 V 6 A	96x135x92	LP702105I
230-400/24 V 8 A	105x145x105	LP702108I
230-400/24 V 11 A	120x165x113	LP702110I
230-400/24 V 18 A	135x185x135	LP702115I
230-400/24 V 25 A	151x248x147	LP702125T

■ THREE-PHASE DC POWER SUPPLY



LP701310I



■ SCHRACK-INFO

Dc power supply executed as three-phase safety transformer according to DIN EN 61558, VDE 0570, part 2-6 with silicon bridge rectifier. Residual ripple < 5%. Terminals with screwed and plug-in connection (6.3 x 0.8 mm), prepared for safety class I, 50/60 Hz, ta 40°C, dip impregnation, colour green RAL 6004.

Voltage and output power range: U_{PRI} : 400 V, U_{SEC} : 24 Vdc

Typ	Current A	a	b	c		d	e	f	Weight-kg
Dimensions in mm									
LP701310I	10	150	66	173	113	49	5,8x11,0	5,3	
LP701315I	15	150	78	150	90	64	5,8x11,0	7,3	
LP701320I	25	180	125	240	136	76	7,0x13,0	9,8	
LP701330I	40	228	114	281	176	71	9,0x13,0	13,6	

■ 3x400 V 50/60 Hz

DESCRIPTION	DIM. (WxHxD) mm	ORDER NO.
400/24 V DC 10 A	150x173x66	LP701310I
400/24 V DC 15 A	150x150x78	LP701315I
400/24 V DC 25 A	180x240x125	LP701320I
400/24 V DC 40 A	228x281x114	LP701330I

POWER SUPPLY UNITS

■ SUPPLY VOLTAGE 3 A STABILISED NG 12/3 A



YY494004

■ SCHRACK-INFO

The NG 12 supply voltage is a compact, dimensioned and good value module designed for rapid mounting using a snap-on fastening mountable on DIN rails. Upon request, the NG12 power supply can also be integrated into transformers.

- Input: 15 V AC/DC
- Output: Stabilised 12 V DC
- Max. 1% variance with current consumption $\leq 2,2$ A
- Short-circuit proof
- Fine-wire fuse 20 x 5, 6,3 A, quick-break
- Adjustable output voltage 5-15 V DC
- Ex-factory setting 12V DC
- Residual ripple $\leq 1\%$
- Design type for enclosures, can be snapped onto DIN rail
- Input voltage 28 V $\pm 15\%$ to 10%, 16 - 63 Hz
- Output voltage: continuously adjustable between 5 - 24 V using LED display
- Output current = 2,5 A

DIM. (WxHxD)

85x65x72

ORDER NO.

YY494012

■ SUPPLY VOLTAGE 3 A STABILISED NG 24/3 A



YY494004

■ SCHRACK-INFO

The NG 24 supply voltage is a compact, dimensioned and good value module designed for rapid mounting using a snap-on fastening mountable on DIN rails. Upon request, the NG 24 power supply can also be integrated into transformers.

- Input: max. 30 V AC/DC
- Output: Stabilised 24 V DC,
- Max. 1% variance with current consumption 3 A
- Short-circuit proof
- Fine-wire fuse 20 x 5, 6,3 A, quick-break
- Adjustable output voltage 16-28 V DC
- Ex-factory setting 24 V DC
- Residual ripple $\leq 1\%$

DIM. (WxHxD)








85x65x72

ORDER NO.










YY494004-A

PROTECTION TYPES FOR ELECTRICAL DEVICES

DEGREES OF PROTECTION: ACCIDENTAL CONTACT AND PROTECTION AGAINST FOREIGN BODIES

First characteristic IP	Protection area	
	Name	Declaration
0 	No protection	No protection for persons against direct contact of active or moving parts No protection of the devices against entering of foreign bodies.
1 	Protection against large foreign bodies	Protection against accidental touching of active and internal moving parts, e.g. by hand, but no protection against deliberate contact with these parts. Protection against entering of foreign bodies with a diameter larger than 50 mm.
2 	Protection against medium-sized foreign bodies	Protection against contact by finger of active or moving parts. Protection against entering of foreign bodies with a diameter larger than 12 mm.
3 	Protection against small foreign bodies	Protection against contact of active or moving parts by tools, wires or similar objects larger than 2.5 mm. Protection against entering of foreign bodies with a diameter larger than 2.5 mm.
4 	Protection against corn-like foreign bodies	Protection against contact of active or moving parts by tools, wires or similar objects larger than 1 mm.
5 	Protection against dust deposits	Total protection against contact of energised parts or moving parts Protection against damaging dust deposits. The entrance of dust is not prevented entirely, but dust is not allowed to enter in such quantities, so that it can alter the functioning.
6 	Protection against dust entrance	Total protection against contact of energised parts or moving parts. Protection against dust entrance.

DEGREES OF PROTECTION: AGAINST WATER

Second characteristic IP	Protection area	
	Name	Declaration
0 	No protection	No special protection.
	Protection against vertically dropping water	Water drops falling vertically may not have any damaging influence.
2 	Protection against inclined dropping water	Water drops falling at an angle up to 15°, may not have any damaging influence.
3 	Protection against spraying water	Water falling at an angle up to 60°, may not have any damaging influence.
4 	Protection against squirting water	Water spraying against the device from all directions may not have any damaging influence.
	Protection against water jet	A jet of water from a nozzle, being directed at the device from either side may not have any damaging influence.
6 	Protection against overflow	Water may not enter the device, in case of an overflow, in such an amount, that it will cause any damage.
	Protection in case of submerging.	Should the device be submerged under water, in given pressure and time conditions, water may not enter the device in such an amount that it will cause any damage.
8 	Protection in case of immersion	Should the device be immersed, water may not enter it in such an amount that it will cause any damage.

GENERAL TERMS OF DELIVERY



General Terms of Delivery

issued by the Austrian Electrical and Electronics Industry Association

1. Scope

1.1 These General Terms shall govern legal transactions between business enterprises, namely the delivery of commodities and, mutatis mutandis, the rendering of services. Software transactions are with precedence governed by the Software Conditions issued by the Austrian Electrical and Electronics Industry Association, assembly work by the Terms and Conditions for Assembly Work issued by the Austrian Power Current and Light Current Engineering Industry and/or (where applicable) the Terms and Conditions for the Assembly of Electrical Equipment used in Medicine issued by the Austrian Electrical and Electronics Industry (the current versions are available at www.feei.at).

1.2 Any departure from the terms and conditions mentioned in 1.1 above shall be valid only if expressly accepted in writing by Seller.

2. Submission of offers

2.1 Seller's offers shall be deemed offers without engagement.

2.2 Tender documents and project documentation must not be duplicated nor made available to third parties without the permission of Seller. They may be claimed back at any time and shall be returned to Seller immediately if the order is placed elsewhere.

3. Conclusion of contract

3.1 The contract shall be deemed concluded upon written confirmation by Seller of an order received or upon dispatch of a delivery.

3.2 Particulars appearing in catalog, folders etc. as well as any oral or written statements shall only be binding if Seller makes express reference to them in the confirmation of the order.

3.3 Subsequent amendments of or additions to the contract shall be subject to written confirmation.

4. Prices

4.1 Prices shall be quoted ex works or ex Seller's warehouse without VAT, packing and packaging, loading, disassembly, take-back and proper recycling and disposal of waste electrical and electronic equipment for commercial purposes as defined by the Ordinance Regulating the Handling of Waste Electrical Equipment. Buyer shall be liable for any and all charges, taxes or other duties levied in respect of delivery. If the terms of delivery include transport to a destination designated by Buyer, transport costs as well as the cost of any transport insurance desired by Buyer shall be borne by the latter. Delivery does not, however, include unloading and subsequent handling. Packaging materials will be taken back only by express agreement.

4.2 Seller reserves the right to modify prices if the order placed is not in accordance with the offer submitted.

4.3 Prices are based on costs obtaining at the time of the first quotation. In the event that the costs have increased by the time of delivery, Seller shall have the right to adjust prices accordingly.

4.4 In carrying out repair orders, Seller shall provide all services deemed expedient and shall charge Buyer for the same on the basis of the work input and/or expenditures required. The same holds for any services or additional services the expediency of which becomes apparent only as the repair order is executed. In such an event special notification of Buyer shall not be required.

4.5 Expenses for estimates of costs of repair and maintenance or for expert valuations shall be invoiced to Buyer.

5. Delivery

5.1 The period allowed for delivery shall commence at the latest of the following dates:

a) the date of order confirmation by Seller;

b) the date of fulfillment by Buyer of all the conditions, technical, commercial and other, for which he is responsible;

c) the date of receipt by Seller of a deposit or security due before delivery of the goods in question.

5.2 Buyer shall obtain whatever licences or approvals may be required from authorities or third parties for the construction of plant and equipment. If the granting of such licences or approvals is delayed for any reason the delivery period shall be extended accordingly.

5.3 Seller may carry out, and charge Buyer for, partial or advance deliveries. If delivery on call is agreed upon, the commodity shall be deemed called off at the latest one year after the order was placed.

5.4 In case of unforeseeable circumstances or circumstances beyond the parties control, such as all cases of force majeure, which impede compliance with the agreed period of delivery, the latter shall be extended in any case for the

duration of such circumstances; these include in particular armed conflicts, official interventions and prohibitions, delays in transport or customs clearance, damages in transit, energy shortage and raw materials scarcity, labor disputes, and default on performance by a major component supplier who is difficult to replace. The aforesaid circumstances shall be deemed to prevail irrespective of whether they affect Seller or his subcontractor(s).

5.5 If a contractual penalty for default of delivery was agreed upon by contracting parties when the contract was concluded, it shall be executed as follows, and any deviations concerning individual items shall not affect the remaining provisions: Where delay in performance can be shown to have occurred solely through the fault of Seller, Buyer may claim for each completed week of delay an indemnity of at most one half of one per cent, a total of no more than 5 %, however, of the value of that part of the goods to be delivered which cannot be used on account of Seller's failure to deliver an essential part thereof, provided the Buyer has suffered a damage to the aforesaid extent. Assertion of rights of damages exceeding this extent is precluded.

6. Passage of risk and Place of performance

6.1 Enjoyment and risk shall pass to Buyer at the time of departure of the goods ex works or ex warehouse regardless of the terms of quotation (such as carriage paid, C.I.F. etc.) agreed upon. This provision also includes the case of shipment being effected, organised and supervised by Seller and the case of delivery being made in connection with assembly work to be undertaken by Seller.

6.2 For services the place of performance shall be the place at which the service is rendered; the risk in respect of such services or any part thereof that may have been agreed upon shall pass to Buyer at the time the services have been rendered.

7. Payment

7.1 Unless otherwise agreed, one third of the purchase price shall fall due at the time of receipt by Buyer of the order confirmation of Seller, one third after half the delivery period has elapsed and the balance at the time of delivery. Irrespective thereof the turnover tax comprised in the amount of the invoice shall be paid within 30 days of the invoice date.

7.2 In the case of part settlements the individual part payments shall fall due upon receipt of the respective invoices. The same shall apply to amounts invoiced for additional deliveries or resulting from additional agreements beyond the scope of the original contract, irrespective of the terms of payment agreed upon for the principal delivery.

7.3 Payment shall be made without any discount free Seller's domicile in the agreed currency. Drafts and checks shall be accepted on account of payment only, with all interest, fees and charges in connection therewith (such as collection and discounting charges) to be borne by Buyer.

7.4 Buyer shall not be entitled to withhold or offset payment on the grounds of any warranty claims or other counterclaims.

7.5 Payment shall be deemed to have been effected on the date at which the amount in question is at Seller's disposal.

7.6 If Buyer fails to meet the terms of payment or any other obligation arising from this or other transactions, Seller may without prejudice to his other rights

a) suspend performance of his own obligations until payments have been made or other obligations fulfilled, and exercise his right to extend the period of delivery to a reasonable extent,

b) call in debts arisen from this or any other transactions and charge default interest amounting to 1.25 % per month plus turnover tax for these amounts beginning with the due dates, unless Seller proves costs exceeding this.

In any case Seller has the right to invoice all expenses arising prior to a lawsuit, especially reminder charges and lawyer's fees.

7.7 Discounts or bonuses are subject to complete payment in due time.

7.8 Seller retains title to all goods delivered by him until receipt of all amounts invoiced including interests and charges.

Buyer herewith assigns his claim out of a resale of conditional commodities, even if they are processed, transformed or combined with other commodities, to Seller to secure the latter's purchase money claim. In the case of resale granting respite Buyer shall have the power of disposal of the product under retention of ownership only with the proviso that upon reselling Buyer notifies the secondary buyer of the assignment for security or enters the assignment in his account books. Upon request Buyer has to notify the assigned claim and the debtor thereof to Seller, and to make all information and material required for his debt collection available and to notify the assignment to the third-party debtor. If the goods are attached or otherwise levied upon, Buyer shall draw attention to Seller's title and immediately inform Seller of the attachment or levy.