Product overview

to the WELBA milk cooling program Valid from 01. January 2024





WELBA GmbH $\,\cdot\,$ Electronic Control Engineering



Content

Milk temperature regulators	
MRF-M	Page 3
MRF-M2 (+ optional accessories)	
MPR-M	Page 3
Pasteur regulators	
MRF-2-PA2	Page 3
Milk cooling plant controls	
ETM-W300	Page 4
MS-5000	Page 4
Universal tank control units	
WTS-100-2 (WTS 100-2 G1)	Page 5
WTS-200 (WTS-200 G1)	
WTS-200 (+ optionales Zubehör)	
WTS-300 (WTS-300-G1-X)	
Optional accessories for WTS-300	
Tank monitor	Ü
TW-31 (+ optional accessories)	Page 8
TW-31 (+ optional accessories)	
	age s
Cleaning control for milking systems	D 40
WMS-100	
WMS-100-G1	Page 10
Replacement control unit for milking plants	
RM-20 for Westfalia TURBOSTAR automatic washing systems	
RM-30 P	
RM-30 F	
RM-30 R	
RM-30 G	
Optional accessories for RM-30 (x)	Seite 11
Control for milking parlor heaters	
MRF-U	
MRF-U-A-G2	Page 12
Ice-bank regulator	
EA-100	Page 12
EA-200	
Alarm and remote maintenance modem	
ESIPM-001 (via Email)	Page 13
ESGSM-001 (via SMS)	
Optional accessories alarm and remote maintenance modems	
Remote control / Liter display	3 3 3
LA-01-A	Page 13
	rage is
Accessories housing	
WMG 122/120-01	
WMG 225/305-01 + 02	
SSH 128/89-01	•
Sensors	
Ice-bank electrodes	Page 15
Terms and conditions	Page 16



Milk temperature regulators

standard temperature sensor All controllers incl.



Accessories housing 68 x 106 mm see page 14

MRF-M Art.-No. 100248

Temperature regulators with after stirring function for the milk cooling technology.

- 2 switching stages for controlling agitator and compressor motors.
- 2 freely adjustable setpoints (Cooling temperatures)
- Nachrühren, man. Zwischenrühren (kurz oder lang), Kühlstartverzögerung, etc.
- Front panel mounting



68 x 106 mm

Accessories housing see page 14

MRF-M2 Art -No. 105750

Temperature regulators with after stirring function for the milk cooling technology. Contains all functions like MRF-M, but additionally:

- <u>Ice protection</u> via digital input for opt. pressure sensor
- Cooling start delay, interval cooling (pulse cooling)
- PC parameterizable, RS485 interface
- Readable data memory for error diagnosis
- designed for calf feeding by robot

Optional accessories MRF-M2



- incl. signal converter USB / RS485
- cable length 2,00 m

Adapter LAN-RS485-001 Art.-No. 105758

- incl. signal converter LAN / RS485





Email + alarm and remote maintenance modem ESIPM-001 Art.-No. 105744

SMS + alarm and remote maintenance modem ESGSM-001 Art.-No. 105065



48 x 96 mm

MPR-M Art.-No. 100247

Temperature regulators with after stirring function for the milk cooling technology.

- 2 switching stages for controlling agitator and compressor motors.
- 2 freely adjustable setpoints
- . External inputs for intermediate stirring and setpoint switching
- Front panel mounting

Pasteur regulator



68 x 106 mm

Accessories housing see page 14

MRF-2-PA2 Art.-No. 105784

Freely programmable pasteur regulator, can be used for either 2-point or PID control. It is designed for milk pasteurization, the production of cheese, yoghurt, etc.

- Ramp temperatures and hold phases freely adjustable
- PC configurable, interface RS485
- Logging of the temperature profile via the connected PC

Optional accessories MRF-2-PA2

Adapter cable USB-RS485-001 Art.-No. 105033

- incl. signal converter USB / RS485
- cable length 2,00 m





Milk cooling plant control





ETM-W300

Art.-No. 100535

Temperature regulators for the milk cooling technology.

- 2 switching stages for controlling agitator and compressor motors
- 2 freely adjustable setpoints (internally switchable)
- Intermediate stirring and continuous stirring function
- On-Off function
- Splash-proof housing (IP65)



135 x 170 x 145 mm

MS-5000

The MS-5000 is used for fully automatic control of compressor, agitator motor and fan in milk cooling systems.

- . Integrated temperature controller with automatic stirring
- . Operation via foil keypad



<u>Version for 230 V: (for 1-phase systems)</u>
For open tanks and immersion coolers without their own control box, a power contactor is installed in the MS-5000 to switch large compressors directly.



Version for 400 V: (for 3-phase systems)
Here, one contactor with motor protection
switch (see table) is installed in each case.

Type Compressor

MS-5000K-00-1 230V (without motor protection switch) *Art.-No.* 100292

MS-5000K-04-3 400V (with motor protection switch 2,4-4A) *Art.-No.* 103043

MS-5000K-06-3 400V (with motor protection switch 4-6A) *Art.-No.* 100290

MS-5000K-10-3 400V (with motor protection switch 6-10A) *Art.-No.* 100291

MS-5000K-12-3 400V (with motor protection switch 10-12A)

MS-5000K-16-3 400V (with motor protection switch 12-16A) *Art.-No.* 105737

Universal cooling tank controls





WTS-100-2 Art.-No. 103065

Extremely compact cooling tank control with automatic cleaning.

- Integrated milk cooling regulator with automatic after stirring function for controlling compressors and agitator motors.
- Extensive options for optimum tank cleaning.



WTS-100-2-G1 Art.-No. 103062

Ideal for repair replacement of existing milk cooling tanks.

The complete control pre-assembled in the control box (IP65) for wall mounting.

- Contactor for washing pump and heater already integrated and ready wired.
- All loads are connected directly to terminal blocks.

305 x 225 x 125 mm



WTS-200 Art.-No. 105011

Extremely compact cooling tank control with automatic cleaning.

- Integrated milk cooling regulator with automatic after stirring function for controlling compressors and agitator motors.
- Extensive options for optimum tank cleaning.
- RS-485 interface for convenient parameterization via free software "Welba-Konsoft"

WTS-200 G1 Art.-No. 1063610

Ideal for repair replacement of existing milk cooling

The complete control pre-assembled in the control box (IP65) for wall mounting.

- Contactor for washing pump and heater already integrated and ready wired.
- All loads are connected directly to terminal blocks.



Optional accessories WTS-200

Adapter cable USB-RS485-001 Art.-No. 105033

- incl. signal converter USB / RS485
- cable length 2,00 m



Email + alarm and remote maintenance modem ESIPM-001 Art.-No. 105744

SMS + alarm and remote maintenance modem ESGSM-001 *Art.-No.* 105065



Ideal also for the repair exchange with existing milk cooling tanks!

unavailable

O optional

standard

Universal tank control units

including programming and data analysis software **WELBA KONSOFT**



Compact cooling tank control unit with automatic cleaning.

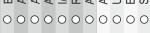
- Integrated milk cooling regulator with after stirring function for controlling compressors and agitator motors
- Extensive options for optimum tank cleaning
- with integrated tank monitor (optional modules required)
- with extended milking robot remote control

factory installed

attached

& remote maintenance modem Agitator monitoring module ESVAW-001
Agitator monitoring module ESVAW-002
Agitator monitoring module ESVAW-003
I/O Expansion module ESIO-001
Remote control / Liter display USB module external ESUSB-1 Email Alarm- & remote mainten SMS Alarm- & remote maintena Adapter cable USB-RS485-001 Remote control / Liter display Adapter LAN-RS485-001

Battery holder (without batteries)





WTS-300

Art.-No. 104491

Complete control pre-assembled in the control box



WTS-300-G1-000

Art.-No. 105058

- without agitator monitoring
- incl. contactor for washing pump and heater







WTS-300-G1-001

Art.-No. 105036

- monitoring of 2 agitators 230 V
- incl. contactor for washing pump and heater







WTS-300-G1-002

Art.-No. 105059

- monitoring of 2 agitators 230 V (integrated relay)
- incl. contactor for washing pump and heater







WTS-300-G1-003

Art.-No. 105064

- monitoring of 1 agitator 400 V
- incl. contactor for washing pump and heater

0 • - - • 0 0 0 0 0 0





WTS-300-G1-004

Art.-No. 105063

- monitoring of 2 agitators 230 V
- complete wiring the relays on terminal block
- only contactor for washing pump

-0000000

Page 6

305 x 225 x 125 mm



Optional accessories WTS-300



Remote control / Liter display FB-LA-01



Battery holder (without batteries)

Art.-No. 105044

- factory pre-assembled in control box



Agitator monitoring module ESVAW-001

Art.-No. 105030

- up to 2 agitators (1 phase 230 V each) factory pre-assembled



Agitator monitoring module ESVAW-002

Art.-No. 105048

- up to 2 agitators incl. relay (1 phase 230 V each)
- factory pre-assembled



Agitator monitoring module ESVAW-003

Art.-No. 105062

- 1 agitator (3 phase 400 V)
- factory pre-assembled



I/O Expansion module ESIO-001-A

Art.-No. 105761

- 2 analog / 5 digital inputs
- incl. 5 relays



Adapter cable USB-RS485-001 Art.-No. 105033

- incl. signal converter USB / RS485
- cable length 2,00 m



Adapter LAN-RS485-001

Art.-No. 105758

- incl. signal converter LAN / RS485



USB module external ESUSB-1

Art.-No. 105046



Email + alarm and remote maintenance modem ESIPM-001

Art.-No. 105744



SMS + alarm and remote maintenance modem ESGSM-001

Art.-No. 105065



Tank monitor TW-31

including programming and data analysis software WELBA KONSOFT







The Tank Monitor TW-31 complies with all legal requirements and the requirements of the leading dairies. It automatically monitors the milk temperature, the functions of the agitator and the correct sequence of the cleaning process in the milk cooling tank

- incl. USB stick interface for direct data readout
- incl. agitator monitoring module
- incl. battery holder (batteries not included)



305 x 225 x 125 mm



TW-31-230

Art.-No. 105078 for cooling tanks with up to 2 agitator motors 230 V

TW-31-400-1

Art.-No. 105079 for cooling tanks with 1 agitator motor 400 V

TW-31-400-2

Art.-No. 105080 for cooling tanks with 2 agitator motors 400 V

● standard

unavailableoptional

	fac	tory	inst	alled		а	ttac	ned
Integrated USB module	Battery holder (without batteries)	Agitator monitoring module ESVAW-003	Agitator monitoring module ESVAW-004	SMS alarm & remote mainten. modem (int.)	Adapter LAN-RS485-001	Adapter cable USB-RS485-001	SMS alarm & remote mainten. modem (ext.)	EMAIL alarm & remote mainten. modem (ext.)
•	•	-	•	0	0	0	0	0
•	•	•	_	0	0	0	0	0
•	•	•	_	_	0	0	0	0

Optional accessories TW-31 (partially pre-assembled at the factory)



Adapter cable USB-RS485-001 Art.-No. 105033

- incl. signal converter USB / RS485
- cable length 2,00 m

Adapter LAN-RS485-001 Art.-No. 105758

- incl. signal converter LAN / RS485



EMAIL + alarm and remote maintenance modem ESIPM-001 (external)

Art.-No. 105744



SMS + alarm and remote maintenance modem ESGSM-001 (external)

Art.-No. 105065



SMS + alarm and remote maintenance modem ESGSM-002 (internal).nt.-No. 105742 only for 230 - factory pre-assembled in control box



Tank monitor TW-32

including programming and data analysis software WELBA KONSOFT







$Monitors \, two \, milk \, cooling \, tanks \, at \, the \, same \, time!$

The TW-32 has enormous potential for savings by simultaneously monitoring milk temperatures, agitator functions and cleaning processes of two separate milk cooling tanks - all fully automatically!

By using the device for two tanks and the associated lower assembly costs, a cost savings compared to the installation of two separate tank guards enormous.



305 x 225 x 125 mm



TW-32-230

Art.-No. 105081 for 2 cooling tanks with up to 2 agitator motors 230 V

TW-32-400

Art.-No. 105082 for 2 cooling tanks with 1 agitator motor 400 V each

_	unavailable

○ optional

\cup	Optional
	standard

factory installed attached							ned	
Integrated USB module	Battery holder (without batteries)	Agitator monitoring module ESVAW-003	Agitator monitoring module ESVAW-004	SMS alarm & remote mainten. modem (int.)	Adapter LAN-RS485-001	Adapter cable USB-RS485-001	SMS alarm & remote mainten. modem (ext.)	EMAIL alarm & remote mainten. modem (ext.)
•	•	_	•	0	0	0	0	0
•	•	•	_	_	0	0	0	0

Optional accessories TW-32 (partially pre-assembled at the factory)



Adapter cable USB-RS485-001 Art.-No. 105033

- incl. signal converter USB / RS485
- cable length 2,00 m

Adapter LAN-RS485-001 Art.-No. 105758

- incl. signal converter LAN / RS485



EMAIL + alarm and remote maintenance modem ESIPM-001 (external)

Art.-No. 105744



SMS + alarm and remote maintenance modem ESGSM-001 (external)

Art.-No. 105065



SMS + alarm and remote maintenance modem ESGSM-002 (internal). 105742

only for 230 - factory pre-assembled in control box



Cleaning control for milking systems





WMS-100

Art.-No. 104415

Designed for installation in dishwashers of all common milking machine types.

- Takes control of the system components via an easyto-use cleaning program.
- Detergent supply via cup or metering pumps adjustable
- For optimum wash results, different air injector systems are supported for optimal plug formation.
- High saving potential of natural resources such as cleaning agents, energy and water through the individual adaptability of the work steps.



WMS-100-G1

Art.-No. 104474

The WMS-100 pre-assembled in the control box (IP65) for wall mounting. All consumers are connected directly to terminal blocks.

Replacement control unit for milking plants for Westfalia TURBOSTAR automatic washing system



RM-20

Art.-No. 105001

... to replace defective time switches, time relays, level controllers or mechanical thermostats in Westfalia TURBOSTAR cleaning machines.

With finished wiring harness for quick installation \dots



Replacement control unit for milking plants





RM-30 P

Art.-No. 105794

For conventional systems with a selector switch. The existing selector switch will continue to be used. The controller is screwed to the wall next to the system.

Programming either via the 4 pushbuttons of the control or via 'Welba-Konsoft'. Start cleaning with the supplied push-button.



RM-30 F

Art.-No. 105795

In a closed plastic housing for invisible installation in the cleaning machine. The remote control included in the scope of delivery is screwed to the wall next to the system or built into the housing of the cleaning machine.

Programming via remote control or 'Konsoft'.



RM-30 R

Art.-No. 106301

For conventional systems with a selector switch. The existing selector switch will continue to be used. For invisible installation in cleaning machines (NOT moisture-proof).

Start cleaning with the supplied push-button.



RM-30 G

Art.-No. 105796

As RM-30 F, but pre-installed in a switch box for wall mounting.

The switch box offers enough space for the installation of additional components such as contactors or motor protection switches.

Optional accessories RM-30 (x)



Remote control

Art.-No. 105797

- only usable for RM-30 P + R



Cable harness (3 m)

A suitable cable set with pre-assembled ferrules is optionally available for the RM-30. With the cable set, the wiring of the replacement control is significantly simplified and the installation time is reduced enormously.



Control for milking parlor heaters



Accessories housing see page 14

68 x 106 mm

MRF-U

Art.-No. 104462

Temperature reglulator with integrated time switch for controlling of infrared heaters in milking palors.

- 4 freely adjustable time intervals
- regulates the temperature in the milking parlor to the desired value.
- Superordinate frost protection function



MRF-U-A-G2

Art.-No. 104465

The control is used for automatic control of infrared heaters in milking parlor heaters.

- Integrated timer with 4 freely adjustable time intervals.
- Integrated temperature control function regulates the temperature in the milking parlor to the desired value.
- Two contactors allow direct connection of up to 6 radiant heaters.
- Superior frost protection prevents frost formation in the milking parlor outside the time intervals.

Ice-bank regulators





Ice bank controlle can be used as ice-bank controller, ice difference controller or level controller

- optionally with 2 or 3 sensors.
- waterproof shed



Ice bank controlle can be used as ice-bank controller, ice difference controller or level controller

- optionally with 2 or 3 sensors
- adjustable sensitivity
- for mounting on 35 mm DIN rail



Alarm- and remote maintenance modems



EMAIL + alarm and remote maintenance modem ESIPM-001

Art.-No. 105744

is required for the

- Remote maintenance via internet connection (LAN / WIFI)
- Alarm notification by email
- Status query via the internet

No mobile phone card (SIM card) is required for use



180 x 110 x 65 mm

SMS + alarm and remote maintenance modem ESGSM-001

Art.-No. 105065

is required for the

- Remote maintenance via mobile phone modem
- Alarm notification by SMS
- Status query via SMS

A <u>standard mobile phone card</u> (SIM card) with data volume is required for use. Required batteries not included.



Optional accessories for alarm- and remote maintenance modems

Adapter cable USB-RS485-001 Art.-No. 105033

- incl. signal converter USB / RS485
- cable length 2,00 m

Adapter LAN-RS485-001

Art.-No. 105758

- incl. signal converter LAN / RS485

Remote control / Liter display



Remote control / Liter display LA-01-A Art.-No. 105760



Accessories housing



Suitable for MRF-... | FB-LA-01



Suitable for WTS-... | WMS-... | TW-...



WMG 122/120-01 Art.-No. 100354

Wall mounting housing 122 x 120 x 55 mm, with front panel cutout 88 x 56 mm.

incl. 2x PG screw connection M16x1,5 1x PG screw connection M12x1,5 4x Screws for housing cover

4x Screws for mounting the circuit board

Screw connections pre-assembled

WMG 305/225-01

Art.-No. 105032

Wall mounting housing 305 x 225 x 125 mm, with front panel cutout 156 x 96 mm.

incl. 2x PG screw connection M25x1,5

2x PG screw connection M20x1,5

7x PG screw connection M16x1,5

1x PG screw connection M12x1,5

1x 35 mm DIN rail

3x Cable grommets M16

4x Screws for housing cover

Screw connections pre-assembled

WMG 305/225-01

Art.-No. 106323

Wall mounting housing 305 x 225 x 125 mm, with front panel cutout 156 x 96 mm.

incl. 1x PG screw connection M25x1,5

4x PG screw connection M20x1,5

1x 35 mm DIN rail

4x Screws for housing cover

Screw connections pre-assembled



SSH 128/89-01

Art.-No. 103291

Splash guard as a complete set

- incl. seal and required assembly material
- incl. 2x PG screw connection M16x1,5
- incl. 2x PG screw connection M12x1,5

Screw connections enclosed loosely



Sensors

ø 6,0 mm

other cable lengths on demand



Sensor ø 6,0 mm

1	Cable materia	al PVC		
	TF1A-2	100117	Cable length 2,0 m	KTY 81-210
	TF1A-3	100121	Cable length 3,0 m	KTY 81-210
	TF1A-5	100123	Cable length 5,0 m	KTY 81-210
	TF1A-6	100124	Cable length 6,0 m	KTY 81-210
	TF1A-7	100125	Cable length 7,0 m	KTY 81-210
	TF1A-10	100119	Cable length 10,0 m	KTY 81-210
	TF2A-2	100135	Cable length 2,0 m	PT-100 2 leads
	TF3A-6	100147	Cable length 6,0 m	PT-100 3 leads
	TF4A-2	106311	Cable length 2,0 m	PT-1000
	TF4A-5	106312	Cable length 5,0 m	PT-1000
	TF4A-7	106313	Cable length 7,0 m	PT-1000
	TF8A-7	100156	Cable length 7,0 m	NTC 2,2 kOhm
	TF13A-2	106315	Cable length 2,0 m	NTC 10,0 kOhm

Cable material PVC shielded

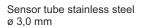
TF1D-5 100132 Cable length 5,0 m KTY 81-210

Cable material Silicon

TF1B-2 100127 Cable length 2,0 m KTY 81-210

WITH DOUBLE SENSOR - Cable material Silicon

TFD1B-2 105763 Cable length 2,0 m **2x** KTY 81-210



Sensor ø 3,0 mm

Cable material: Teflon

TF4G-2-A 105762 Cable length 2,0 m PT-1000

Sensor tube stainless steel

Sensor ø 4,0 mm

Cable material: Teflon

TF3G-2-B 105070 Cable length 2,0 m PT-100 3 L

ø 4,0 mm

Sensor tube brass

ø 9,5 mm

Sensor ø 9,5 mm

Cable material: PVC

TF9A-7	103203	Cable length 7,0 m	KTY 81-210
TF4A-7-C	106314	Cable length 7,0 m	PT-1000

Ice-bank electrodes



Cable material: PVC

EAE1 100047 Cable length 3,0 m

Terms and conditions of sale and service provision

Welba GmbH, Gewerbepark Siebenmorgen 6, DE-53547 Breitscheid

1. Scope

The following terms and conditions of sale and delivery apply to all business transactions between Welba and the purchaser. Any conditions applied by the purchaser which diverge from or contradict our terms and conditions are hereby explicitly rejected. Any supplementary conditions are subject to our approval in writing.

Even if we are aware of contradictory, diverging or non-regulated terms and conditions applied by the purchaser, only our general terms and conditions of business will apply, even if the client refers to the validity of his general terms and conditions of business in orders and in all correspondence.

Our terms and conditions of business will also apply to future contracts with the purchaser even if we do not mention this specifically.

2 Prices

The prices quoted are subject to alteration and will not necessarily apply to subsequent orders. They are based on current wage and material costs, and if those costs change by the time of delivery, we are entitled to adjust our prices accordingly. Prices are in all cases ex-works, excluding packaging − unless otherwise agreed on the basis of the INCOTERMS. Within Germany we deliver free to destination as from a net value of goods of €1000. Packaging is invoiced at cost and is non-returnable.

3. Payment

Unless advance payment is agreed, all invoices are payable within 30 days of the invoice date or date of notification that the goods are ready for dispatch, in cash or by transfer to our bank without deductions or charges to us. Payments are always accounted against the oldest debt, even if a payment is indicated as being for specific goods. Offsetting or retaining amounts is possible only in the event of claims by the client which are specifically recognised by us in writing. Warranty claims do not affect the date on which payments are due. No reminder is required for the client to be regarded as in default. Without prejudice to other rights, late payment interest of 3% p.a. more than the current discount rate of the Deutsche Bundesbank (German Central Bank) will be charged.

Failure to comply with payment terms, or circumstances which become known to us after signature of the contract and which are likely to reduce the creditworthiness of the client or person jointly liable for the client's obligations, will mean that all outstanding sums are immediately due, regardless of any bills of exchange that have been accepted. In such cases we are also entitled to make further deliveries only against full cash payment in advance or against provision of a security or, if payment other than in cash has been agreed, to require payment in cash, to withdraw from the contract, or to claim compensation for non-fulfilment.

NB: Unless otherwise specified, the invoice date is the delivery date.

4. Documents

The documents relating to the order, including illustrations, drawings and weights, are for guidance only. The details should not be regarded as reflecting exactly the characteristics of our products. Clients are not absolved from the duty, before using our products for their purposes, to check the details and recommendations provided by us.

5. Copyright

Welba retains all property rights and copyright in respect of all estimates, samples, drawings and other documents. These may not be made accessible to third parties. If for any reason the order is not placed or not executed, all drawings and other documents must, at our request, be returned to us immediately.

6. Delivery and purchase obligation

Delivery periods are indicated in good faith, but are not binding. Part-deliveries are permissible. The delivery period starts on the day on which Welba and the client reach agreement on the order. It is complied with if notice that the goods are ready for dispatch is sent in due time.

In the event of purchasing delays we reserve the right, after granting the purchaser an appropriate period for fulfilment or remedy without success, to withdraw from the contract or to claim damages. The amount of damages we can claim without producing supporting evidence is 25% of the agreed price. The purchaser may produce evidence that no loss has arisen or that the loss was less than the said amount. We reserve the right to claim a larger amount of damages subject to the production of supporting evidence.

Call orders must – unless specifically agreed otherwise – be called off within 12 months of the original order date.

If we are prevented from delivering as a result of force majeure, strike, civil disturbance, power failure, working restrictions, war, mobilisation, transport/traffic disturbation, disruptions to operations at Welba or our suppliers, or similar circumstances beyond our control despite reasonable precautions, we are released from our contractual obligations for the duration of the circumstances concerned. If delivery becomes impossible as a result of those circumstances, our duty to fulfil the contract lapses. In particular, we are released from all obligations if our suppliers are released from their obligation to deliver on the basis of their terms and conditions of delivery and payment.

7. Shipping

In principle, all consignments are shipped at the expense and risk of the client. In the absence of specific arrangements, we will use what we consider to be the most suitable shipping method. We do not warranty to use the cheapest method. Insurance, always at the client's expense, is taken out only if the client specifically requests it.

8. Transfer of risk

The risk - including the risk of confiscation - is transferred to the customer when the goods are handed over to the haulier or forwarder or, at the latest, when they leave the factory, even where delivery is free to the client's premises, FOB or CIF.

9. Warranty

Our warranty terms, to the exclusion of all other warranty claims, are as follows:

- a) We warranty that our products are free from manufacturing and material defects. The warranty period for all mechanical and electronic parts is 12 month.
- b) The warranty period starts on the delivery date. If our operating or maintenance instructions are not observed, if products are modified in any way, if components are changed or if non-specification materials are used, the warranty is rendered invalid.
- All defective parts or services will, at our discretion, be either repaired, rectified or replaced free of charge.
- d) We may satisfy the client's claims for remedy by offering an appropriate price reduction for the defective component or service.
- e) Warranty claims will be entertained only if the client complies with the agreed payment terms. If a claim in respect of a defect is lodged, the client must have made part-payments which are commensurate with the defect.
- f) Welba may comply with a request for warranty repairs to be carried out at a location specified by the client, in which case the parts under warranty will not be invoiced, but working time and travel costs will be charged at our standard rates.
- g) The client is entitled to withdraw from the contract in respect of the defective parts or services if repair or rectification is not possible or if three attempts fail.
- h) The warranty only covers defects present when the risk is transferred. It is valid only if the client complies with the obligation to examine the goods and report defects immediately. The client must report faults within three days of receiving the goods.
- The warranty does not cover normal wear and tear, or damage resulting from incorrect or negligent use, overloading, or use with unsuitable equipment.
- j) We do not warranty or accept liability for products from other manufacturers. However, our warranty rights against the supplier are transferred to the client from the outset. Only if claims cannot be pursued against the supplier because the latter has become insolvent will Welba honour the warranty for defective products from other manufacturers in the same way as for its own products.

10. Liability for defects

Welba is liable for damage (direct or indirect) only in the event of gross negligence on our part. Further liability claims - in particular consequential damage, nonfulfilment or late fulfilment - are excluded, with regard to both the liability basis and the liability amount. This also applies to claims resulting from unauthorised action.

Purchasers of all electrical and electronic devices manufactured or marketed by Welba undertake not to resell them in the territory of the United States of America or Canada without our written consent.

The following applies to software developments: The placing of an order constitutes an acknowledgement that it is not possible to develop software in such a way that it will operate without errors under all application conditions. The client is obliged to provide the supplier with verifiable evidence of the nature and occurrence of deviations from the documentation and to assist with the containment of errors. Liability for defects does not cover errors caused by deviations from the conditions of use envisaged for the program and indicated in the documentation.

11. Place of fulfilment and court of law

The place of fulfilment for all mutual obligations is Breitscheid. This applies also to cheques and bills of exchange taken in payment. If the client is a registered trader, the court of law competent for all disputes directly or indirectly resulting from the contract is the court at Linz/Rhein. Contractual relationships are governed by German law excluding the UN Sales Convention (CISG).

12. Retention of title

All goods, even when supplied abroad, remain our property until all our claims against the client resulting from the business relationship have been met.

Until then, our goods shall not be pledged, deposited as security or otherwise transferred, and resale or further use is permitted only in the case of dealers and contractors in normal business circumstances, and provided that the dealer or contractor receives immediate payment or stipulates that title is not transferred to the third party until the latter has paid for the goods in full. To this extent we authorise transfer of title to the third party. In the event of resale or further use, the client, in placing the order, transfers his future purchasing price or contract remuneration claims to us as security, without the need for any special declaration to this effect. Until further notice, the client is authorised to collect newly arising claims, provided he immediately and directly meets our due claims.

If the goods are impounded by a third party, the client is obliged to inform the enforcing official about the retention of title. He is also obliged to inform us by registered letter, attaching the relevant documentation together with a solemn declaration that the impounded goods are identical with those supplied by us under retention of title and not yet paid for in full. Any costs thus incurred are for the client's account. The client is obliged, in the event of suspension of payments, to identify without delay any remaining goods supplied by us and assigned receivables and to provide us with a precise list thereof.

www.welba.de