DTB 275
DTB 375

Instruction manual

dtb275375

1. Presentation

The DTB 275 and DTB 375 are single phase, thyristor secondary controlled, mains voltage compensated, AC and DC square wave welding machines designed for gas tungsten arc welding (GTAW/TIG) and shielded metal, arc welding (SMAW/MMA), with integral water cooling unit.
The electronics control system monitors and maintains the welding current to correspond with the desired settings. The mains voltage compensation circuit maintains the arc voltage and welding current stable through fluctuations of +/–10% in the supply mains. The welding machines are equipped for an optional remote control, optional voltmeter and ammeter. A heavy duty lifting eye permits transportation by an overhead crane or lifting device. The DTB 275 and DTB375 are equipped with an under carriage and a gas bottle/water circulator tray for easy portability.

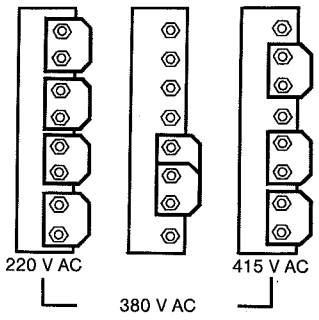
2. Installation

2.1 Choose a proper installation site for the welding machine that permits freedom of air movement into and out of the machine, and where excessive quantities of dust, moist air or corrosive vapors can not be circulated through the machine. A minimum of 46 cm of unrestricted space must be maintained arround the machine. Do not place any filtering devices over the air intake passage of the welding machine.

This will restrict the volume of air circulating through the machine and cause overheating of the internal components.

2.2 The DTB 275 and DTB 375 are reconnectable for 220/380/415 V, 50 Hz single phase input and connected for 380 V, 50 Hz when shipped from the factory. Make sure that the machine is connected for the appropriate mains voltage. See fig. 2.1 in this

Fig. 2.1



manual or the digram attached to the inside of the access door on the left side of the machine for correct positioning of the jumper links of the primary terminal board. Unused jumper links should be placed in parallel with a used jumper to prevent loss of the unused link.

2.3 The welding machine should be operated from a separately fused or circuit breaker-protected circuit. See table 2.1 for proper mains cable and fuse sizes.

Table 2.1 Mains Supply Cable and Fuse Capacity

Mains supply AMP	Fuse AMP		Mains cable X-section mm^2		Earth cable X-section mm^2	
	DTB 275	DTB 375	DTB 275	DTB 375	DTB 275	DTB 375
220	100	100	35	35	8	8
380	63	63	8	13	5	5
415	60	60	8	13	5	5

2.4 The single phase main cable enters through the rear of the machine and connects to the primary board terminal board TBI, terminals marks L1 & L2. The earth cable must be connected to the earth terminal marked on the base of the machine. Access to the primary terminal boards and the earth connection is through the access door on the left side of the machine.

2.5 The welding cables should have a cross section area of no less than those listed in table 2.2 for the desired welding current and length of cable. It is recommended the welding cables to be kept as short as possible to reduce the amount of voltage drop.

Table 2.2
Welding Cable Recommended X-Section in mm^2

Welding current	Total length of copper cable in meters							
AMP	15*	30	45	60	75	90	100	120
100	21	21	34	34	34	42	54	54
200	42	42	42	54	67	85	107	107
300	67	67	67	85	107	107	144	170
400	85	85	85	107	144	170	170	214

*A. 15 meters or less.

2.6 The gas inlet connection is located on the rear panel. Connect the gas hose from the gas supply to the gas connection designated "Inlet". Always use non-conductive hose for the supply line. The gas flow must be controlled accurately with the aid of a regulator and a flow meter.

2.7 The water inlet and discharge connections are located on the rear panel. Connect the water supply of the connections designated "Inlet" and the water discharge to the connection designated "Discharge". Always use a non-conductive hose for the water supply and discharge lines.

2.8 The welding torch is connected to the machine through the torch receptacle on the front of the machine. Attach the torch by pushing the torch straight into the receptacle and then tighten the connecting ring securely. The gas is supplied to the torch through the torch receptacle.

The torch receptacle also provides the connection terminals for the contactor control switch on the welding torch. The water is supplied to the welding torch through two quick-connect connectors on the front of the machine and designated "Inlet" and "Discharge".

2.9 A switch and receptacle are provided for optional remote control. If an optional foot-operated or thumb operated remote control is used, connect to the designated receptacle on the front of the machine and place the remote control switch in the remote control position.

3. Function of controls

3.1 Power switch (Fig. 3.1)

Placing the power switch in the ON position energizes the welding machine fan and control circuitry, and places the welding machine in a ready-to-weld status. Placing the power switch in OFF position shuts the welding machine down.

3.2 Power ON Indicating Lamp (Fig. 3.1)

A white lamp indicates the power switch is in ON position and voltage has been applied.

3.3 Range Switch (Fig. 3.1)

The range switch provides the capability of selecting from two amperage ranges. The high range covers 10-375 amperes on the DTB-375 and 10-275 amperes on the DTB 275. The low range covers 10-125 amperes on the DTB 375 and 10–90 amperes for DTB 275.

3.4 Weld current control (Fig. 3.1)

The weld current control provides a means of selecting the desired weld current within the range being used. Rotating the control in a clockwise direction will increase the output. The weld current may be adjusted while welding.

3.5 Polarity Switch (Fig. 3.1)

The polarity switch provides a means of selecting either AC, DC straight or DC reverse polarity without changing the secondary cable connections.

Placing the switch fully to the right provides DC reverse poarity; to the centre position provides AC; to the left provides DC straight polarity weld current. Do not change the position of the polarity switch while welding or under load as this will cause the contacts of the switch to arc. Arcing across the contacts will cause the contacts to become pitted and thereby eventually to become inoperative.

3.6 Remote Current Control Receptacle and Switches (Fig. 3.1)

If a remote current control is to be used, make connections from the remote current control to

the remote control receptacle as instructed in section 2.9.

When remote control of current is desired, place the remote current control switch in the remote position. Likewise, if a remote current is not to be utilized, the switch must be in the local position. When in the local position, only the weld current control on the front panel will control the current.

The control circuit is designed so that the position of the weld current control on the machine will limit the maximum welding output of each current range when the remote current control is used. Control from this maximum to minimum is accomplished with the remote current control. If full machine range control is required, set the weld current control on the welding machine to maximum position.

For example, if the weld current control is set at one-half of the maximum output, the remote amperage control will provide current control from minimum of the range being used to a maximum of one-half the maximum output.

3.7 High-Frequency Switch (Fig. 3.1)
The high-frequency assembly has a dual function to enable starting the arc in gas tungsten arc welding (TIG) without touching the electrode to the work, and to stabilize the arc during the welding operation.

The high-frequency switch has three positions: DC, Off and AC.

DC is used for arc initiation where high frequency is not required to maintain the arc, for TIG welding on stainless steel. In the DC position, high-frequency is present at the welding electrode until the arc is initiated. Once an arc is established, and even though the remote contactor is closed, the high-frequency is deenergized. High-frequency is present again only after the arc is broken and restarted.

AC position is used for arc initiation and also for stabilization after the arc is started for TIG welding on aluminium. In the continuous position, high-frequency will be present whenever weld current is available at the output terminals.

Off is used when arc initiation is by some other means, scratch start TIG or for stick electrode welding where the arc is started by touching the electrode to the workpiece. High-frequency is not available in the Off position when the contactor is energized.

3.8 Gas Pre-Flow Timer (Fig. 3.1)
A gas pre-flow timer for purging the torch and weld area of atmospheric contaminants is standard. The range of the timer is from 0.1 to 15 seconds.

3.9 Gas Post-Flow Timer (Fig. 3.1)
A switched timer to control gas post-flow to shield molten metal from atmospheric contaminants is standard. In the Off position, there is no gas flow. As the control is rotated clockwise, post-flow can be set from 0.1 to 30 seconds.

3.10 Up-Slope Timer (Fig. 3.1)
An up-slope timer for reduced current starting provides for a gradual current increase from a starting current of 10 amperes to the selected welding current. The slope-up time may be varied from 0.1 second to 5 seconds.

3.11 Down-Slope Timer (Fig. 3.1)
A down-slope timer provides for a gradual decline of weld current or crater fill from the selected weld current to a final weld current of 10 amperes. The slope-down time may be varied from 0.1 second to 5 seconds.

3.12 AC Wave Balance Control (DTB 375 only)
When the AC wave balance control is set in the 50/50 balance position the output wave shape is balanced between reverse and straight polarity. By rotating the control clockwise from 50/50 balance to more straight polarity less tungsten heating results and higher welding current may be applied to the tungsten to obtain more penetration. By rotating the control counter-clockwise toward the 50/50 balance point, more tungsten heating and cleaning action are provided. Sufficient cleaning action is obtained for most applications over the entire range of the control. The AC wave balance control is a continuous type control and may be adjusted while welding.

The scale surrounding the AC wave balance control is calibrated arbitrarily and should not be misconstrued as an amperage or voltage control. It only adjusts the AC wave shape. When employing the DC Stick Electrode (SMAW) process, the AC wave balance control should be set to the 50/50 balance position.

3.13 Two-Stroke/Four-Stroke Switch (Fig 3.1)
The two-stroke/four-stroke switch provides for the selections of either two or four stroke operation of the contactor through the welding torch switch. In the two-stroke position, the torch switch operates as an On/Off switch. In the four-stroke position, the torch switch closes and locks the contactor in the closed position when pressed and released. The second operation of the torch switch, press and release, initiates down-slope after which the contactor opens. In the four-stroke operation, if the arc is not obtained, or if the arc is broken for longer than three seconds, the contactor will automatically open.

3.14 Spot Welding Timer with On/Off Switch (Fig. 3.1)
The spot welding timer will only operate in the contactor four-stroke position.
An adjustable 0.1 to 10 second control, with an On/Off switch, provides for controlling a weld period for spot welding. The spot weld time must be set to include the desired up-slope time plus the spot weld time. The control is set to the Off position when the spot weld function is not desired.

3.15 Water On/Off Switch (Fig. 3.1)
The water On/Off switch provides 220 V -1.0 KVA AC power to terminals 1 and 3 on the auxiliary power terminal strip for the operation of the integral water-cooling unit.

3.16 Water ON Indicating Lamp (Fig 3.1)
A white indicating lamp indicates the water switch is in the On position and 220 V AC is applied to terminals 1 and 3 on the auxiliary power terminal strip.

3.17 TIG/MMA Switch (Fig. 3.1)
A TIG/MMA switch provides for selection of either the TIG or MMA welding mode of operation. When in the MMA mode of the operation, the contactor is closed, there is no HF available at the output terminals.

Note: Upslope/downslope controls should be turned to minimum when in MMA mode.

3.18 Fault Indicating Lamp (Fig. 3.1)
A red indicating lamp indicates one of the thermostats has opened and there is a machine fault. Remove the load and allow the machine to cool off. The fan will remain operational and the thermostats will automatically reset when properly cooled off. Always investigate for the cause of the failure.

3.19 Control Circuit Fuse -2.0 A (Fig. 3.1)
A 2.0 ampere fuse protects the control circuit from excessive current draw. If the fuse blows, investigate for the cause of failure before replacing.

3.20 Welding Torch Receptable (Fig. 3.1)
The torch power cable is connected to the OKC terminal and its current supply to the 2 pole Cannon contact. The gas supply is connected to the nipple.

3.21 Welding Work Receptacle (Fig. 3.1)
The welding work receptacle provides for connection of the work cable. When connecting, turn the male connector clockwise to lock and secure.

3.22 MMA Welding Electrode Receptacle (Fig. 3.1)
The MMA welding electrode receptacle provides for connection of the electrode cable. When connecting, turn the male connector clockwise to lock and secure. Remove the MMA electrode cable when operating in TIG mode. If it is left connected, open circuit or arc voltage will be present across the electrode holder and work, when the contactor is closed.

3.23 Welding Torch Water Inlet Connection (Fig. 3.1)
A quick-connected connection is provided for the welding torch water inlet hose.

3.24 Welding Torch Water Discharge Connection (Fig. 3.1)
A quick-connected connection is provided for the welding torch water discharge hose.

3.25 Gas Inlet Connection (Fig. 3.2)
A gas inlet connection is provided for connection of the inlet gas supply line. See 3.6 for connection procedures.

3.26 Digital Meter
Digital meter for measuring voltage and current with hold function for current display.

3.27 Voltage/Current Selector
Selector switch for display of volts or amps.

3.28 Auxiliary Power Circuit Breaker (Fig. 3.2)
A 5 ampere cut-out switch protects the auxiliary power supply from overloads should the circuit breaker operate. Check for the cause of overload before resetting the cut-out switch.

3.29 Auxiliary Power Connection Terminals
1.0 KVA of 220V AC auxiliary power is available at the terminals 1 and 3 on the auxiliary terminal strip. Access to the terminal strip is through the voltage reconnect panel access door on the left side of the machine. Route the conductors to be connected through the access hole in the rear of the machine and connect to the terminal strip. Secure the conductors to the rear panel with a strain relief assembly.

3.30 Water-Guard Connection Terminals
Terminals are provided for the protection of an auxiliary water-guard.

Remove the jumper (J1) connected across terminals 4 and 5 on the auxiliary terminal strip and connect the water-guard across terminals 4 and 5.

With the water-guard installed and the absence of water flow, the fault lamp will light on the front of the machine and the contactor will not close.

3.31 Thermostat Protection
If an overload is present causing the machine to operate at an elevated temperature or a fault occurs to cause the machine to operate at an elevated temperature; one of the two thermostats placed on the SCR assembly and in the main transformer on the DTB 275 or, in the choke in the DTB 375, will operate and deenergize the contactor.

4. Tungsten-Arc welding (GTAW)

4.1 Make all necessary connections as instructed in section 2.0.

4.2. Place the TIG/MMA switch in the TIG position.

4.3 Place POLARITY switch in the desired position.

4.4 Place the RANGE switch in the desired position.

4.5 Select the desired WELD CURRENT setting.

4.6 Select the desired UP-SILOPE time.

4.7 Select the desired DOWN-SLOPE time.

4.8 Select the desired AC WAVE BALANCE setting if welding AC; 50/50 balance if welding DC (DTB 375 only).

4.9 Select the desired PRE-PURGE time.

4.10 Select the desired POST-PURGE time.

4.11 Set the SPOT WELD TIMER to the desired time if spot welding or OFF if not spot welding.

4.12 Select the desired position for the REMOTE CURRENT CONTROL switch, either LOCAL or REMOTE. If remote, connect the remote control.

4.13 Place WATER ON/OFF switch in ON position when using an auxiliary water circulator and in OFF position if none is used.

4.14 Select the desired position for the HIGH-FREQUENCY switch, either START or CONTINUOUS. The CONTINUOUS position must be used for AC welding.

4.15 Select the desired position for the TWO-STROKE/FOUR-STROKE switch.

4.16 Place the power switch in the ON position.

4.17 Commence welding.

5. Shielded Metal-arc welding (SMAW)

5.1 Make all necessary connections as instructed in Section 2.0.

5.2 Place the TIG/MMA switch in the MMA position.

5.3 Place the POLARITY switch in the desired position.

5.4 Place the RANGE switch in the desired position.

5.5 Select the desired WELD CURRENT setting.

5.6 Place the AC WAVE BALANCE control to 50/50 position.

5.7 Select the desired position for the REMOTE CURRENT CONTROL switch either MACHINE or REMOTE. If remote, connect the remote control.

5.8 Set up-slope and down-slope to minimum time.

5.9 Place the POWER switch in the ON position.

5.10 Place GAS POST-FLOW switch in the OFF position.

5.11 Commence welding.

6. Technical description

The DTB 275 and DTB 375 consists of a single phase power section, a control section, a built-in high-frequency system and gas and water controls. The power section is fan cooled and incorporates the main transformer, the inductor, the rectifier, the cooling fan, the mains connection and reconnection terminal board, the power ON/OFF switch, the polarity switch, torch connection and the integral water cooler.

The control section consists of the control electronics for the output, the gas flow, the up/down slope, the two/four stroke control, indicating lamps, high-frequency control, the current range switch and the remote control switch and receptacle. The high-frequency system is a conventional spark gap oscillator with a switch, which can be set for CONTINUOUS use, START ONLY, or OFF. A built-in gas solenoid system controls the gas flow.

Main transformer:
The main transformer is single phase and consists of a laminated core with primary, secondary and auxiliary windings. All wind-ings are insulated and varnish impregnated for class H (180°C) requirements.

Inductor:
The inductor consists of two windings on a laminated core. The windings are insulated and varnish impregnated for class H (180°C) requirements.

Cooling Fan:
The cooling fan provides forced draft cooling for the transformer inductor and the rectifier. The fan motor is thermal protected, equipped with lifetime lubricated sealed ball bearings and operates from 220V AC.

Rectifier:
The rectifier consists of two caps thyristors and a stud mounted freewheeling diode. The components are mounted on special designed heat sinks and force draft cooled. A carefully designed snubber circuit protects the rectifier components from voltage transient surges.

Casing:
The casing is designed of heavy steel plate and protected with a special anti-corrosive undercoat and baked enamel finish. Easy access to all the internal components for service and inspection is available through the removal of the top and side panels.

Control section:
The control section consists of the main control PCB, the Slope Control PCB, the Interface PCB, the Switch PCB, the Post-flow PCB, the Pre-flow PCB and the Spot time PCB. The printed circuit boards are protected with an anti-fungus conformed coating after assembly. The control PCB's and components are contained in an environmentally protected compartment, free from forced draft.

High Frequency System:
The high frequency system is a conventional spark gap oscillator. It consists of a high voltage transformer, capacitor, spark gap assembly, resistor and an induction coil. The system is assembled onto an insulated base and mounted in the power section of the machine.

7. Maintenance

Caution! Be sure the branche circuit or main disconnect switch is open or electrical input circuit fuses are removed before attempting any inspection or work on the inside of the welding machine. Placing the POWER switch on the welding machine in the OFF position does not remove all power from inside the welding machine.

7.1 Fan Motor
All DTB's are equipped with an exhaust fan and rely on forced draft for adequate cooling for high duty cycles and overloads. The fan motor is manufactured with lifetime lubricated sealed ball bearings and no attention should be required.

7.2 Transformer
Occasional blowing out of the dust and dirt from around the transformer is recommended. This should be done periodically depending upon the location of the unit and the amount of dust and dirt in the atmosphere. The welding machine case cover should be removed and a clean dry air stream should be used for this cleaning operation.

7.3 Watercooling Unit
Ensure that the watercooling unit is always filled to at least the three quarters level with a mixture of glycol and distilled water.

7.4 Input power and welding cables
These cables should be inspected periodically. Fraying and broken wire may occur at the electrode holder and work clamp. The insulation should be checked for cracks and bare spots.

7.5 Spark gaps
The spark gaps can be readily inspected by removing the right side "High Frequency Spark Gap" access panel of the machine. The spark gaps are set at 0.008" (0.020 cm) apart at the factory. It will be necessary to readjust these periodically after extended operation. Usually, cleaning and blowing out dust and dirt and adjustment every three to four months will suffice. Readjustment is also indicated when intermittent operation of the gaps is noted. Usually this occurs when the setting has increased to 0.013" (0.033 cm) or greater.

IMPORTANT
Inspection, trouble-shooting and repair of this equipment may ordinarily be undertaken by a competent individual having at least general experience in the maintenance and repair of semi-conductor electronic equipment. Maintenance should not be undertaken or attempted by anyone not having such qualifications.

7.6 Spark Gap Adjustment
Note. Widening the spark gaps through normal operation may, if not corrected, increase the loading of the high voltage capacitor, and thus contribute to its premature failure. Cleaning or dressing of the points of the spark gaps is not recommended.

A. The high frequency output varies directly (up to a certain point) with the spark gap spacing. Opening the gap increases the high frequency radiation. It is suggested that the minimum gap setting of 0.004" (0.010 to 0.020 cm) be maintained.

B. Adjustment: Proceed as follows to adjust the spark gap. (See figure 7.1.).

1. Disconnect all power to the welding machine.

Caution. Be sure the branch circuit or main disconnect switch is open or electrical input circuit fuses are removed before attempting any inspection or work on the inside of the welding machine. Placing the POWER switch or the HIGH FREQUENCY in OFF position does not remove all power from inside the machine.

2. Remove the "High Frequency Spark Gap" access panel from the right side panel.

3. Loosen the pan head screw that secures each single spark contact point assembly.

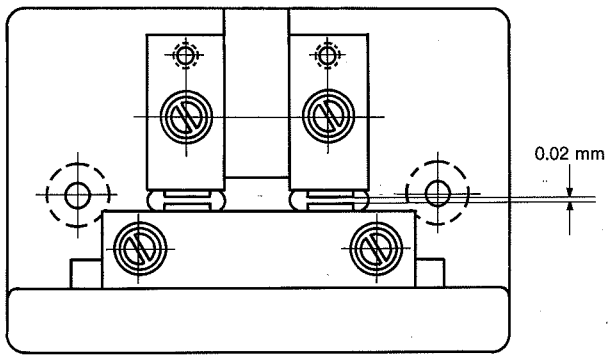
4. Insert a 0.020 cm feeler gage between the spark gap contact points. If a feeler gage is not available, use a double thickness or ordinary paper as a gage until a feeler gage is obtained.

5. Move the loosened contact point until a slight drag is felt as the gage is moved between the points.

6. Tighten the loosened pan screw to secure the contact point assembly. Repeat for both contact points.

7. Reattach the access panel.

8. Reconnect the input power to the machine.



8. Options
8.1 Pulse Control For DTB-275 and DTB-375
The PTC-VI control is an option used with the DTB 275 and 375 welding machines for controlled switching of the output current between high and low values, commonly used for the pulsed TIG welding process.

The weld current control on the front panel of the welding machine is used to set the peak, or high, value of welding current, and the background current control on the PTC-VI control is used to set low value.

When the PTC-VI control is installed on the DTB machine, the machine current control switch should always be in the REMOTE position. Selection of either PANEL or REMOTE current control is then made by the PANEL/REMOTE switch on the PTC-VI control.

8.1.1 Function of Control
8.1.1. Background current—used to set the low value of current from 10% to 100% of PEAK value.

8.1.1.2 Frequency PPS—used to set the frequency in pulses per second from 0.5 pps to 10 pps.

8.1.1.3 Pulse width percent—used to set the percent of time the current is a peak value for each pulse during each pulse cycle. (10–90%.)

8.1.1.4 Peak/Pulse/Background switch

8.1.1.4.1 Peak position—allows peak current only, for setting pulse peak calibrating, or welding without pulsing.

Note:
Peak current is always set by the main current control on the DTB.

8.1.1.4.2 Pulse position—used for pulse welding between peak and background values.

8.1.1.4.3 Background position—allows background current only, for setting or calibrating.

8.1.1.5 Weld current Panel/Remote switch

8.1.1.5.1 Panel position—used when control of current by the main power source potentiometer is desired (no pulse operation).

8.1.1.5.2 Remote position—used for the pulse mode when using other optional remote current control accessories. If one of these accessory controls is to be used, it must be plugged into the 6-pin receptacle in the rear of the PTC-VI and the current control switch placed in REMOTE.

8.2 AC/DC Meter Kit for the DTB 275 and DTB 375

The AC/DC meter kit is an option used ith the DTB 275 and DTB 375 welding machines to monitor the welding operation. The option includes a volt/Ammeter for measuring AC or DC voltage and for measuring AC or DC current.

8.3 Foot Control

The remote current foot control is an option used with the DTB 275 and DTB 375 welding machines when remote control of the output current is desired.

8.3.1 Function of Control

8.3.1.1. When remote control of the output current is desired, place the remote current control switch on the machine front panel in the remote position.

8.3.1.2. The remote control circuit is designed so that the Weld Current Control on the machine front panel will indicate the maximum welding current output for the two output ranges when in the remote control mode of the operation. The remote control will control the current from the pre-set maximum to minimum. If full range control is desired, the Weld Current Control on the machine front panel must be set at maximum.

Configuration

DTB is supplied with 4 link rollers, platform for gas bottle and two OKC connectors.

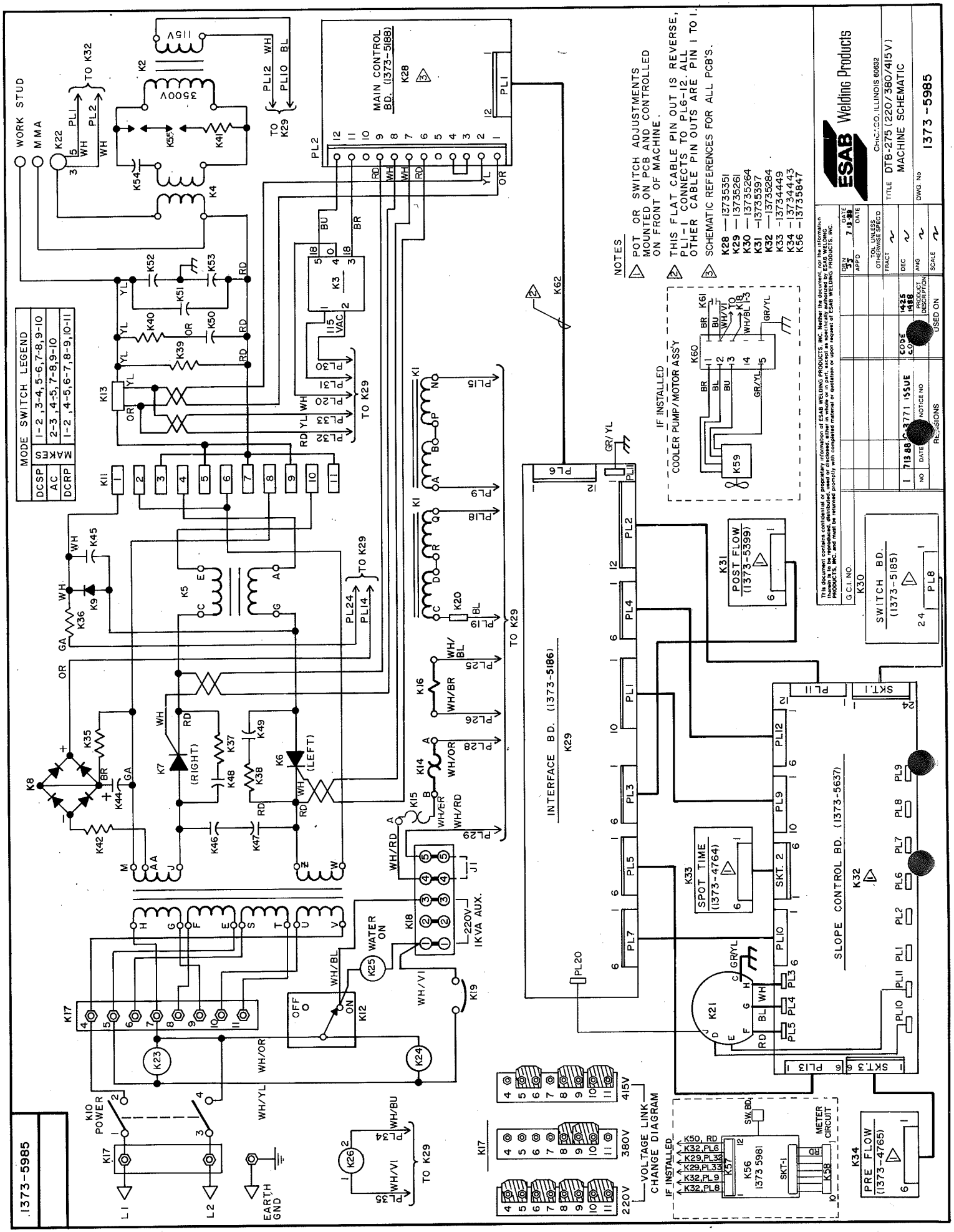
Designation	**Order number**
DTB 275 220/380/415 V 50 Hz	
DTB 375 220/380/415 V 50 Hz	
Digital meter unit (amps & volts) DTB 275	369 762-880
Digital meter unit (amps & volts) DTB 375	369 762-882
Pulse unit	369 740-880
Foot controll	369 764-880
TIG Torch BTD 403 W 4 m	367 050-886

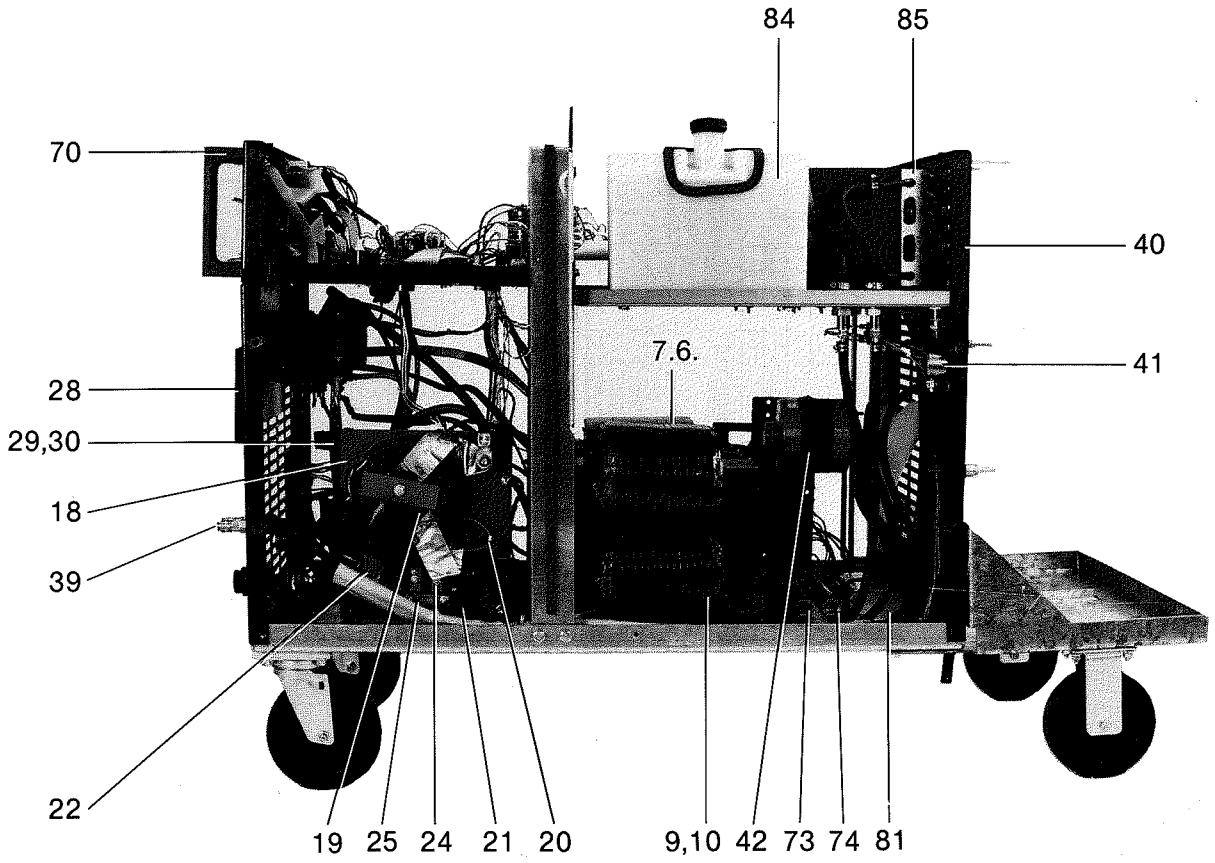
Machine delivered with wheels, platform for gas bottle, connections and 5 m mains cable.

Technical data

	DTB 275	**DTB 375**
Maximum permitted load		
at 35% duty cycle	275 A	375 A
at 60% duty cycle	200 A	300 A
at 100% duty cycle	140 A	230 A
Operating current	10–275 A	10–375 A
Slope up	0.1– 5 s	0.1– 5 s
Slope down	0.1–10 s	0.1–10 s
Gas pre-flow	0.1–15 s	0.1–15 s
Gas post flow	0.1–30 s	0.1–30 s
Spotwelding time	0.1–10 s	0.1–10 s
Open circuit voltage	80 V	80 V
Weight	193 kg	211 kg
Length	940 mm	940 mm
Width	550 mm	550 mm
Height	660 mm	660 mm
Form of protection	IP 23	IP 23
Standards	VDE 0542	VDE 0542
	ISO R700	ISO R700
	SEN 8301	SEN 8301
	NFA 85-011	NFA 85-011

Kretsschema **Schaltpläne**
Circuit diagrams **Schemas électriques**

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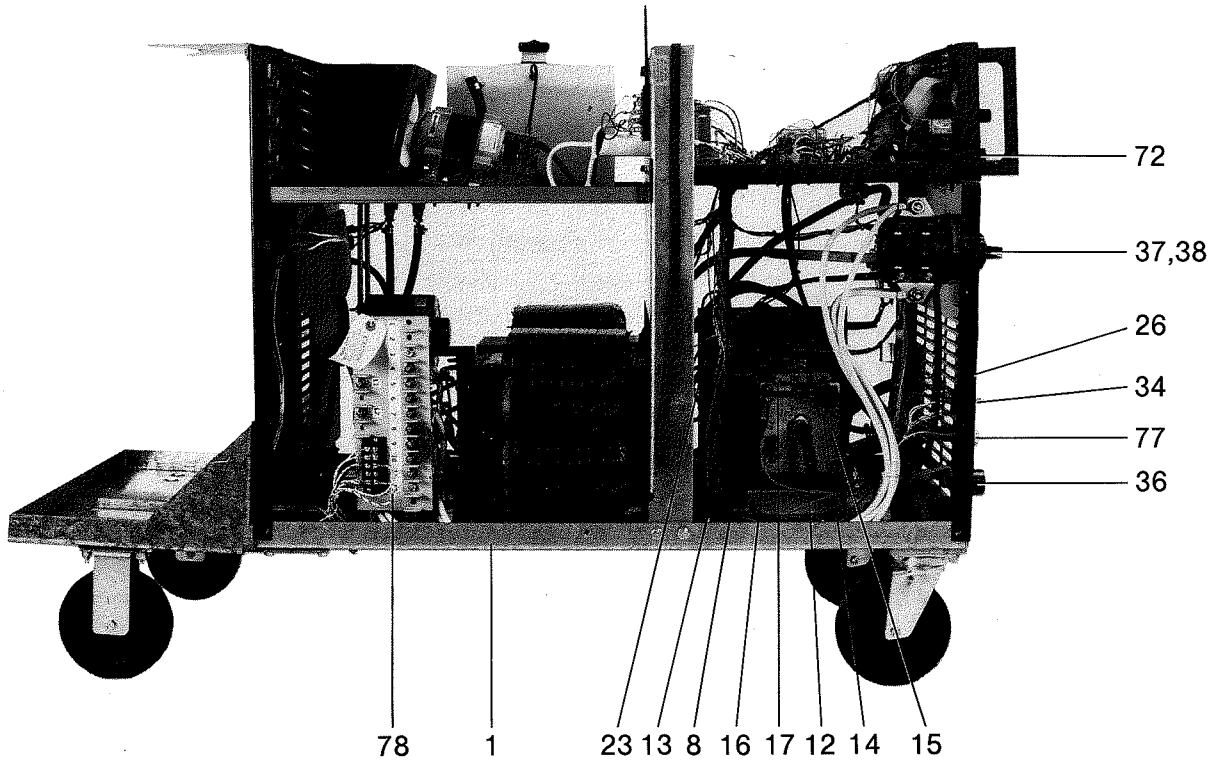
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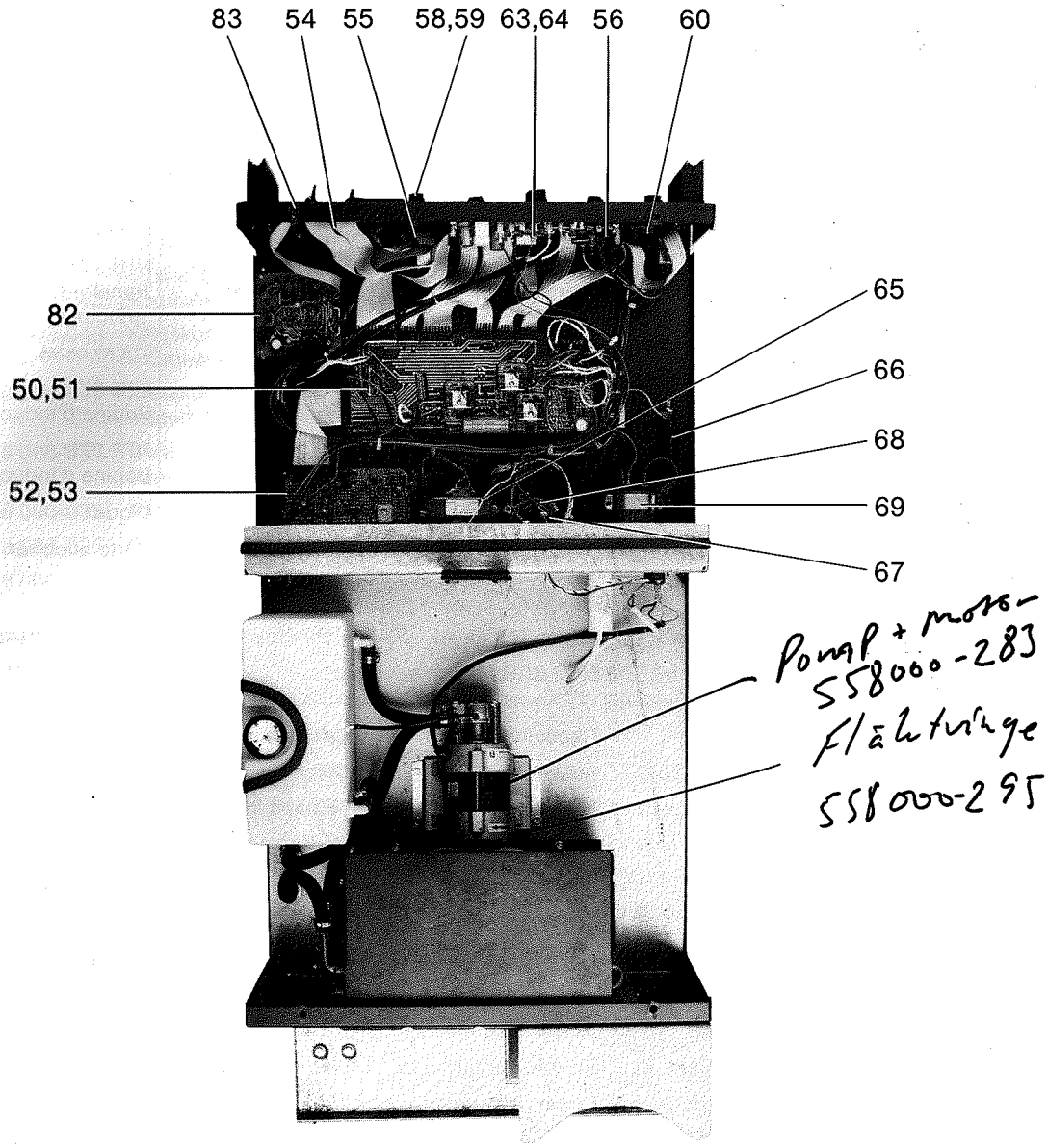
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Pump + motor
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Fläktrinje
558000-295

Reservdelsförteckning
Spare parts list
Ersatzteilverzeichnis
Liste de pièces détachées

Reservdelar beställes genom närmaste ESAB-representant, se sista sidan. Vid beställning v.v. uppge typ och tillverkningsnummer samt benämningar och beställningsnummer enl. reservdelsförteckningen.

Spare parts are to de ordered through the nearest ESAB agency as per the list on the back of the cover. Kindly indicate type of unit, serial number, denominations, and ordering numbers acc. to the spare parts list.

Die Ersatzteile können bei der nächsten ESAB-Vertretung bestellt werden, siehe letzte Seite. Bitte geben Sie Typenbezeichnung und Herstellnummer sowie Bezeichnungen und Bestellnummern it. Ersatzteilverzeichnis an.

Au dos de la brochure, vous trouverez l'adresse du représentant ESAB le plus proche. Prière de lui adresser votre commande, après avoir pris le soin de mentionner le type et le numéro de série de l'unité ainsi que le numéro de commande et la désignation conformément à la liste de pièces détachées.

Pos nr Item no. Pos Nr. No. de ref.	Ant Qty Anz Qte	Best nr Ordering no. Bestellnr. No. de commande	Benämning	Denomination	Bezeichnung	Désignation	Anm Remarks Anm. Remarques
1	1	558 000-019	Bottenplåt	Base	Deckblech, unten	Plaque de fond	
2	1	558 000-269	Höger sido plåt	Right Side Panel	Rechtes Deckblech	Plaque latérale	
3	1	558 000-015	HF-lucka	H.F. access Panel	HF-Deckel	Couvercle HF	
4	1	558 000-273	Vänster sido plåt	Cover plate, left	Deckblech, links	Plaque latérale, gauche	
5	1	558 000-270	Lock	Top cover	Deckblech	Couvercle	
6	1	558 000-153	DTB 375 Huvudtransformator	DTB 375 Transformer	DTB 375 Leistungstrafo	DTB 375 Transformateur principal	K-1
7	1	558 000-108	DTB 275 Huvudtransformator	DTB 275 Transformer	DTB 275 Leistungstrafo	DTB 275 Transformateur principal	K-1
8	1	558 000-017	Termostat	Thermostat	Thermostat	Thermostat	K15
9	1	558 000-154	DTB 375 Induktor	DTB 375 Inductor	DTB 375 Drossel, Induktor	DTB 375 Bobine d'inductance	K5
10	1	558 000-016	DTB 275 Induktor	DTB 275 Inductor	DTB 275 Drossel, Induktor	DTB 275 Bobine d'inductance	K5
12	1	558 000-004	Diod	Diode	Diode	Diode	
13	1	558 000-007	Snubber kort	Snubber Board	Reibungsstoß-dämpfer Platine	Carte snubber	K37, K38, K46, K47, K48, K49
14	1	558 000-003	Likriktarbrygga	Bridge Rectifier	Gleichrichterbrücke	Pont de redresseur	
15	1	558 000-008	Dubber Tyristorbrygga	Dual SCR Asiy	Doppel-thyristorbrücke	Pont de thyristor	K6, K7
16	1	558 000-009	Kondensator	Capacitor Asiy	Kondensator	Condensateur	K45
17	1	558 000-012	Motstånd ISL 25W	Resistor ISL 25W	Widerstand	Résistance ISL 25W	K42
18	1	558 000-091	HF enhet komplett	HF Asiy	HF-Einheit komp.	Unité HF complète	
19	1	558 000-101	Tesla spole	Tesla coil	Tesla Spule	Bobine Tesla	K4
20	1	558 000-121	Motstånd	Resistor	Widerstand	Résistance	K41
21	1	558 000-094	Gnistgap kompl.	Spark gap only	Elektrodenabstand	Eclateur d'arc	K55
22	1	558 000-093	Kondensator	Capasitor 0.002MF	Kondensator	Condensateur	K54
23	1	558 000-092	Transformator	Transformer 6KV	Transformator	Transformateur	K2
24	1	558 000-099	Enkel kontakt	Single contact Asiy	Einfach-Kontakt	Contact simple	
25	1	558 000-096	Dubbel kontakt	Double contact Asiy	Doppel-Kontakt	Double contact	
26	1	558 000-051	Undre frontpanel	Lower front panel	Untere Frontplatte	Plaque frontale inférieure	
28	1	558 000-067	Polaritets omk.	Mode Switch	Polaritäts-Schalter	Commut. de polarité	K11
29	1	558 000-158	DTB 375 Shunt	DTB 375 Shunt	DTB 375 Meßwiderstand	DTB 375 Shunt	K13
30	1	558 000-071	DTB 275 Shunt	DTB 275 Shunt	DTB 275 Meßwiderstand	DTB 275 Shunt	K13
32	2	558 000-069	Lampa vit	Indicator light white	Lampe, weiß	Lampe-témoin blanche	K24, K25
33	1	558 000-070	Lampa röd	Indicator red	Lampe, rot	Lampe-témoin rouge	
34	1	558 000-063	Brytare	Toggle switch	Kippschalter	Interrupteur	K12
35 a	1	558 000-073	OKC-spec.	OKC spec.	OKC Spez.	OKC spec.	K22
35 b	1	156 867-001	Nippel	Nipple	Nippel	Raccord	
35 c	1	5385 009-02	Uttag	Socket/terminal	Anschluß	Prise	
36	2	160 362-881	OKC	OKC	OKC	OKC	

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37	1	558 000-156	DTB 375 Switch ON/OFF	DTB 375 Switch ON/OFF	DTB 375 Schalter Ein/Aus	DTB 375 Interrupteur ON/OFF	K10
38	1	558 000-166	DTB 275 Switch ON/OFF	DTB 275 Switch ON/OFF	DTB 275 Schalter Ein/Aus	DTB 275 Interrupteur ON/OFF	K10
39	2	558 000-075	Snabb kopp. vatten	Quick Discoun. Ad	Schnellkupplung	Branch. rapide eau	
40	1	558 000-086	Bakre plåt	Rear Panel	Hinteres Blech	Plaque arrière	
41	1	558 000-087	Gas relä	Gas solenoid	Gas-Relais	Relais gaz	K16
42	1	558 000-082	Fläkt motor	Fan motor	Gebläsemotor	Moteur ventilateur	K23
47	1	558 000-084	Säkring 5.0 Amp	Fuse 5 Amp	Sicherung	Fusible 5,0 Amp	K19
50	1	558 000-183	DTB 375 Interface	DTB 375 Interface Board	DTB 375 Schnittstelle	DTB 375 Interface	K29
51	1	558 000-041	DTB 275 Interface	DTB 275 Interface Board	DTB 275 Schnittstelle	DTB 275 Interface	K29
52	1	558 000-165	DTB 375 Kontrollkort	DTB 375 Control Board	DTB 375 Platinekarte	DTB 375 Carte de contrôle	K28
53	1	558 000-043	DTB 275 Kontrollkort	DTB 275 Control Board	DTB 275 Platinekarte	DTB 275 Carte de contrôle	K28
54	1	558 000-040	Kretskort – Omkopplare	Switch Board	Platine-Schalter	Circuit imprimé, commutateur	K30
55	1	558 000-045	Kretskort Gaseffektström	Post flow module	Platine Gasnachströmung	Circuit imprimé, postdébit de gaz	K31
56	1	558 000-037	Kretskort Punktsvetsning	Post flow module	Platine Punktschweißen	Circuit imprimé, soudage par points	K33
58	1	558 000-035	Ratt	Knob	Knopf	Volant	
59	1	558 000-025	Ratt	Knob	Knöpfe	Volant	
60	1	558 000-255	Kretskort Gasförströmning	Pre flow timer	Platine Gasvor- strömung	Circuit imprimé prédébit de gaz	K34
61	1	558 000-024	Säkring 2 Amp	Fuse 2 Amp.	Sicherung	Fusioble 2 Amp	K20
63	1	558 000-258	DTB 375 Slope control kort	DTB 375 Slope control board	DTB 375 Stromkontrolle Platine	DTB 375 Carte contrôle de descente	K32
64	1	558 000-257	DTB 275 Slope control kort	DTB 275 Slope control board	DTB 275 Stromkontrolle Platine	DTB 275 Carte contrôle de descente	
65	1	558 000-038	Transformator	Transformer	Trafo	Transformateur	K3
66	1	558 000-134	Motstånd	Resistor	Widerstand	Résistance	K40
67	1	558 000-030	Kondensator 5MF	Capacitor 5mf	Kondensator	Condensateur 5MF	K50
68	1	558 000-032	Kondensator 6800MF	Capacitor 6800mf	Kondensator	Condensateur 6800 MF	K44
69	1	558 000-034	Motstånd	Resistor	Widerstand	Résistance	K35
70	1	156 388-001	Handtag	Handle	Handgriffe	Poignée	
72	1	558 000-163	Potentiometer	Potentiometre	Potentiometer	Potentiomètre	K27
73	1	558 000-107	Motstånd	Resistor	Widerstand	Résistance	K39
74	1	558 000-105	Motstånd	Resistor	Widerstand	Résistance	K36
77	1	558 000-074	Fjärrkontakt	Remote receptucle	Fernanschluß	Contact à distance	K21
78	1	558 000-053	Anslutningspanel	Terminal panel	Anschlußtafel	Panneau de raccordement	K17
81	1	558 000-151	Kondensator	Capacitor	Kondensator	Condensateur	
82		558 000-279	Kretskort digitalt (DTB 275)	PC-Board Digital (DTB 275)	Platine Digital (DTB 275)	Circuit imprimé compteur digital (DTB 275)	
		558 000-332	Kretskort digitalt (DTB 375)	PC-Board Digital (DTB 375)	Platine Digital (DTB 375)	Circuit imprimé compteur digital (DTB 375)	
83	1	558 000-299	Mätinstrument	Digital Meter	Meßinstrument	Compteur digital	
84	1	558 000-302	Vattentank	Water tank	Wassertank	Réservoir d'eau	
85	1	558 000-292	Vattenkylare	Water cooler	Wasserkühler	Réfroidisseur d'eau	
86	1	558 000-289	Vattenpump	Water pump	Wasserpumpe	Pompe à eau	