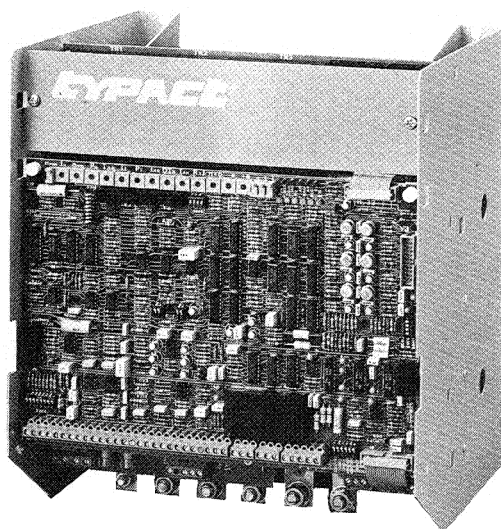
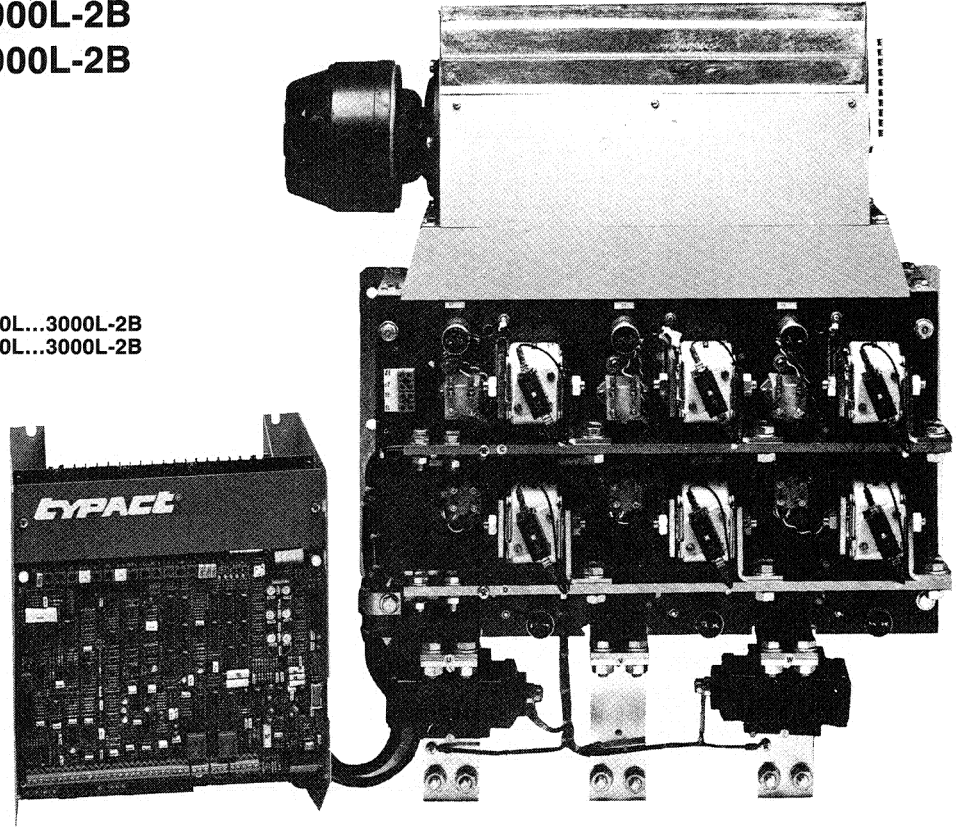


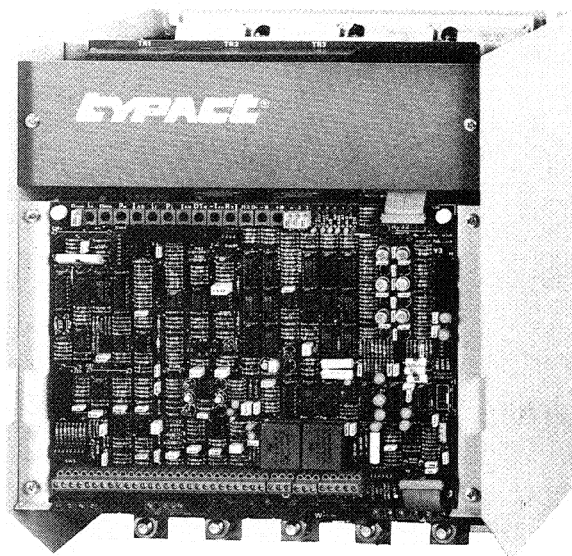
AWA 82-696 (09/87) D/E/F/I

TPy3-415/480-20...3000L-2B
TPy3-500/600-20...3000L-2B

TPy3-415/480-900L...3000L-2B
TPy3-500/600-900L...3000L-2B

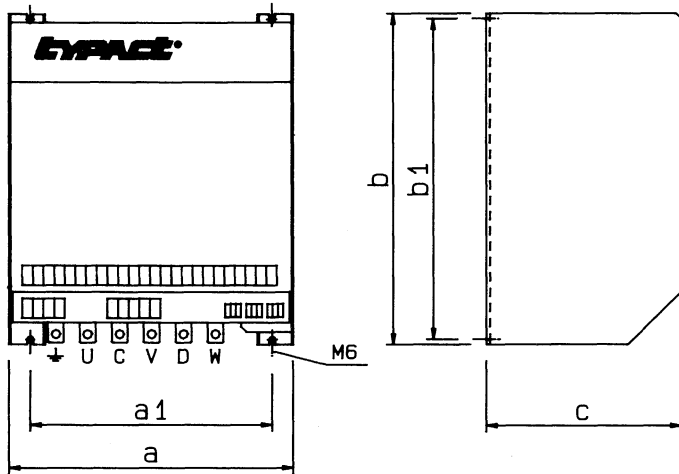


TPy3-415/480-20...185L-2B
TPy3-500/600-20...185L-2B

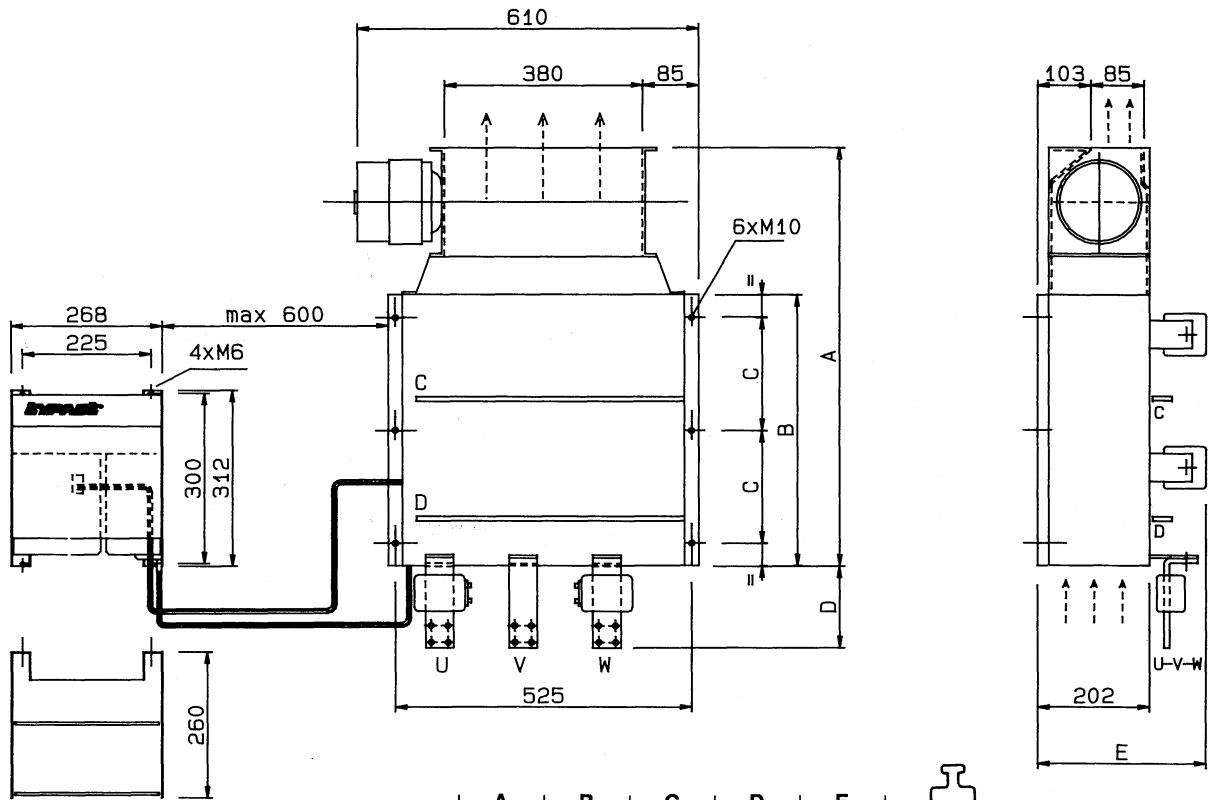


TPy3-415/480-280L...650L-2B
TPy3-500/600-280L...650L-2B

1. **Abmessungen und Gewicht / Dimensions and weight / Dimensions et poids / Dimensioni e peso**

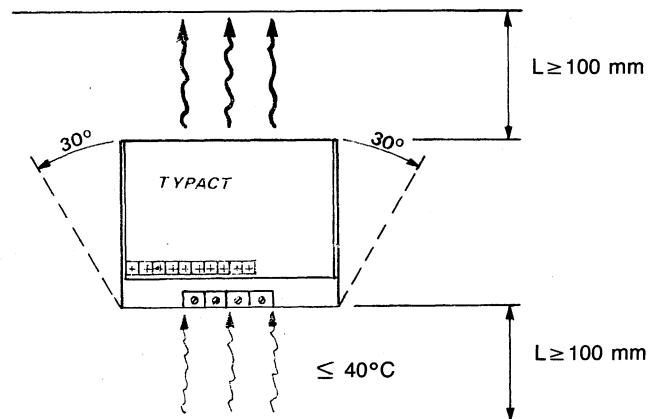
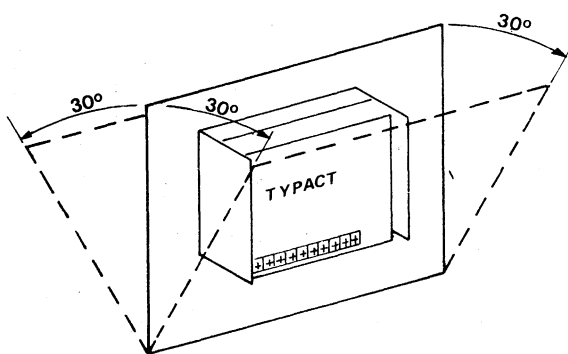


I _{dN}	a mm	b mm	c mm	a1 mm	b1 mm	kg.
20 A	268	312	156	225	300	7,4
40 A	268	312	192	225	300	8,4
70 A	268	312	260	225	300	10,6
110 A	268	312	260	225	300	12,5
140 A	268	312	260	225	300	12,5
185 A	268	312	260	225	300	12,5
280 A	308	340	293	275	325	23,0
350 A	308	340	293	275	325	23,5
420 A	308	340	293	275	325	24,5
500 A	308	340	293	275	325	24,5
650 A	308	340	320	275	325	25,6

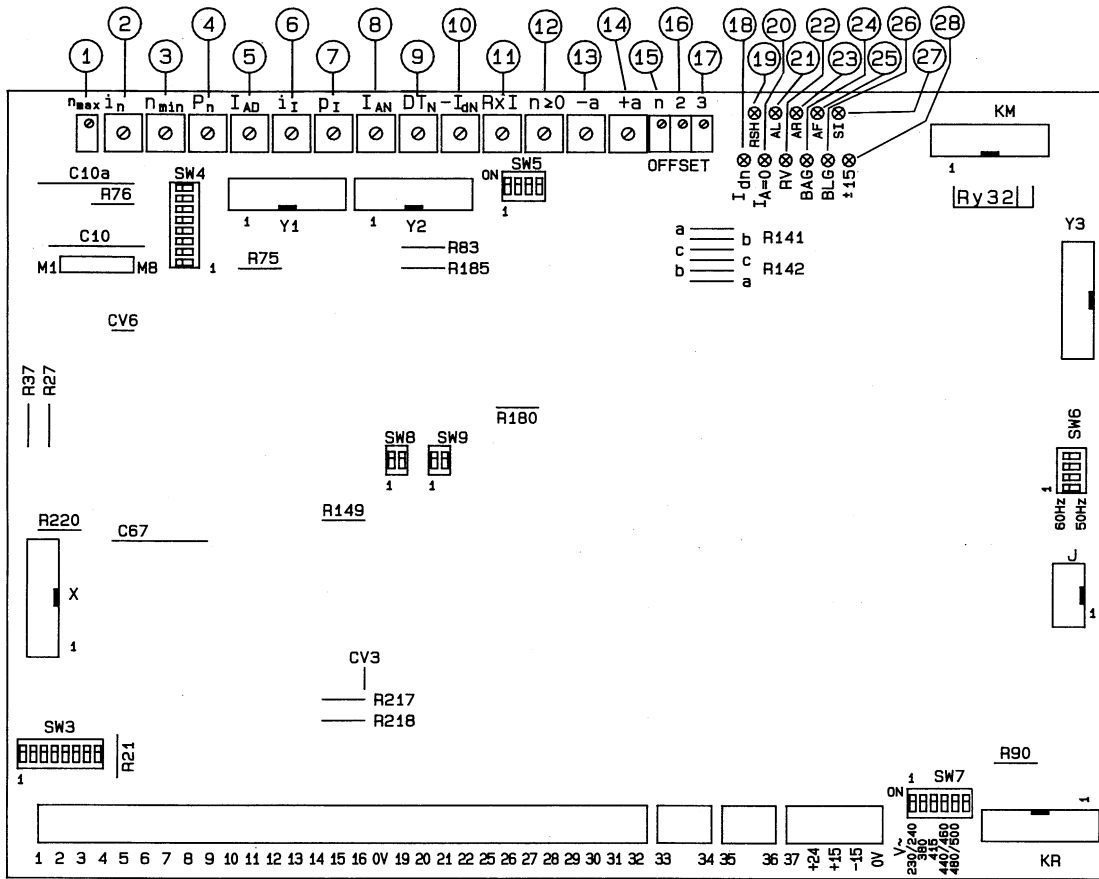


I _{dN}	A mm	B mm	C mm	D mm	E mm	kg.
900 ... 1200 A	560	300	125	145	310	67,5 / 10,8
1600 ... 2000 A	740	480	200	150	310	84,5 / 11,0
2500 ... 3000 A	965	700	300	150	333	127,0 / 12,5

2. **Montage / Mounting / Montage / Montaggio**



3. **Schematische Darstellung / Lay-out diagram / Schéma d'implantation des composants / Rappresentazione topografica**

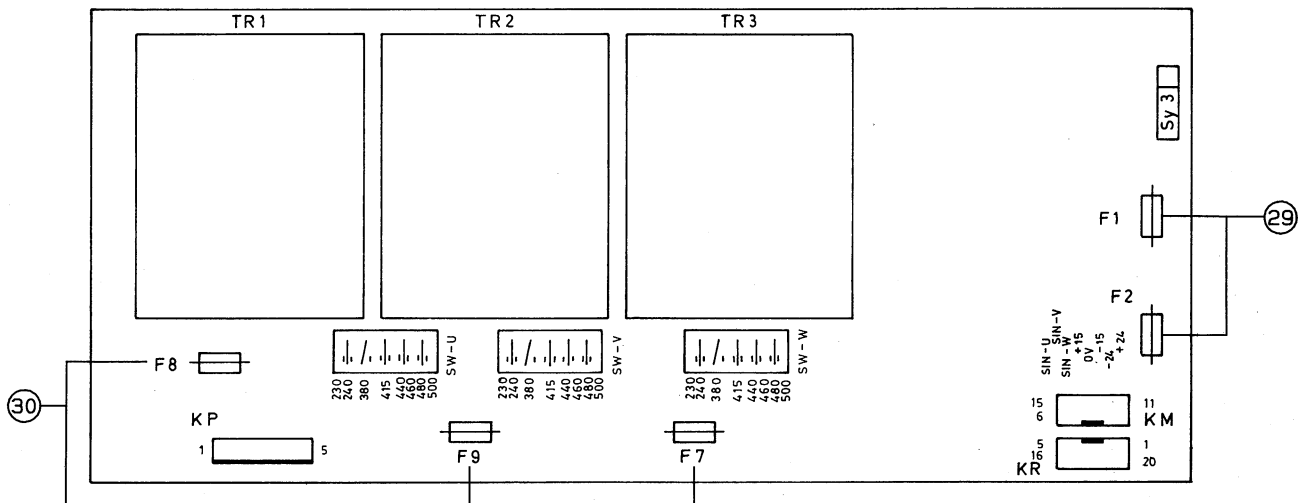


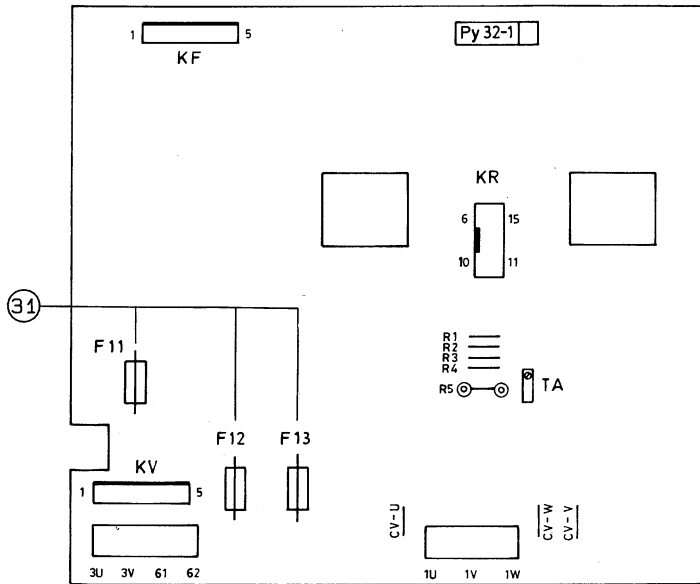
Ry32

Reglerkarte
 Regulation board
 Carte de réglage
 Scheda di regolazione

Sy3

Versorgungskarte
 Supply board
 Carte alimentateur
 Scheda alimentazione



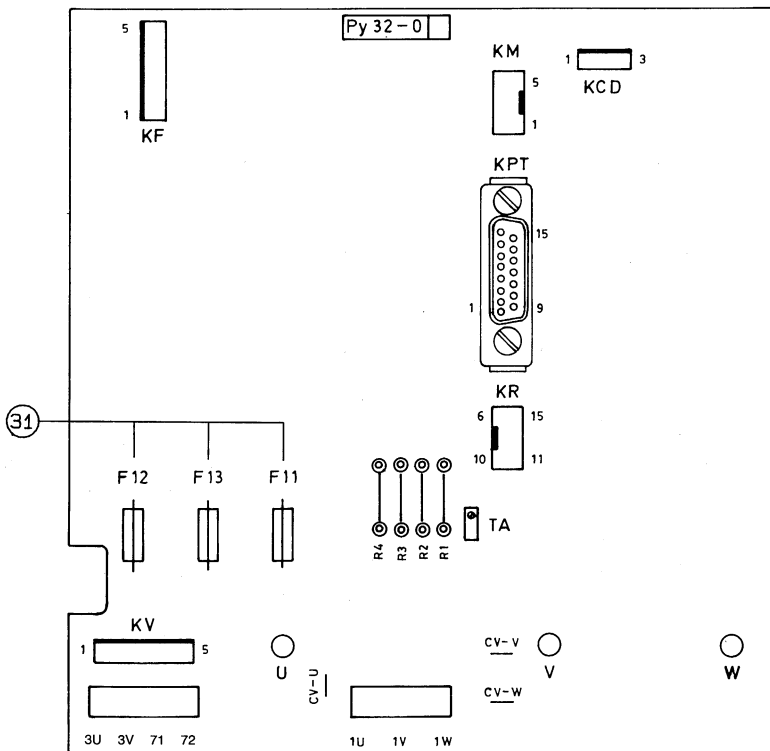
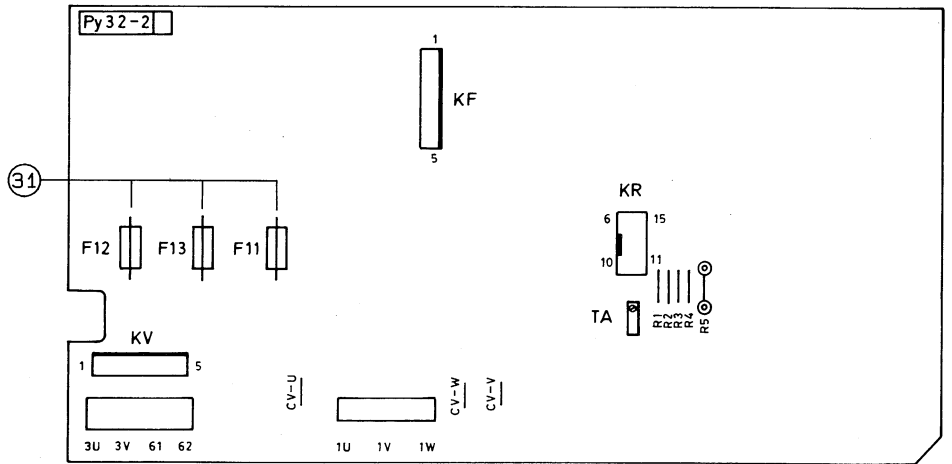


Py32-1

Leistungsteil
 Power board
 Carte de puissance
 Scheda di potenza
 $I_{dN} = 20 \dots 185A$

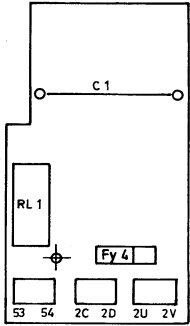
Py32-2

Leistungsteil
 Power board
 Carte de puissance
 Scheda di potenza
 $I_{dN} = 280 \dots 650A$



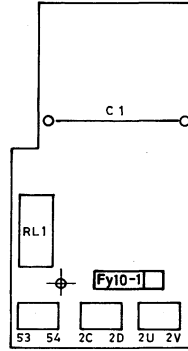
Py32-0

Leistungsteil
 Power board
 Carte de puissance
 Scheda di potenza
 $I_{dN} = 900 \dots 3000A$



Fy4

Feldversorger
 Field supplier
 Carte alimentation du champ
 Scheda alimentazione campo
 $I_{dN} = 20 \dots 40A$

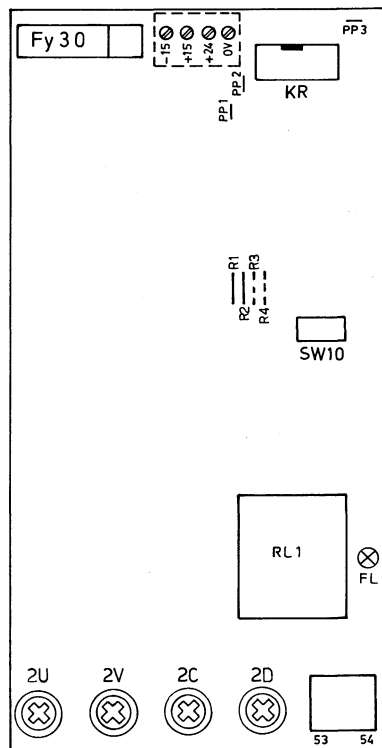
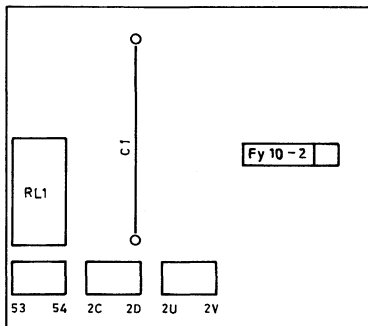


Fy10-1

Feldversorger
 Field supplier
 Carte alimentation du champ
 Scheda alimentazione campo
 $I_{dN} = 70 \dots 185A$

Fy10-2

Feldversorger
 Field supplier
 Carte alimentation du champ
 Scheda alimentazione campo
 $I_{dN} = 280 \dots 650A$



Fy30

Feldversorger
 Field supplier
 Carte alimentation du champ
 Scheda alimentazione campo
 $I_{dN} = 900 \dots 3000A$

Potentiometer / Potentiometers / Potentiomètres / Potenziometri

- ① **n_{max}** = Max. Drehzahl / Max. speed / Vitesse max. / Velocità massima.
- ② **i_n** = I-Anteil des n-Reglers / Speed regulator integral adjustment / Composant intégral du régulateur de vitesse / Componente integrale del regolatore di velocità.
- ③ **n_{min}** = Min. Drehzahl / Min. speed / Vitesse min. / Velocità minima.
- ④ **p_n** = P-Anteil des n-Reglers / Speed regulator proportional adjustment / Composant proportionnel du régulateur de vitesse / Componente proporzionale del regolatore di velocità.
- ⑤ **I_{AD}** = Stromregleradaption / Current regulator adaptation adjustment / Adaptation du régulateur de courant / Adattativo del regolatore di corrente.
- ⑥ **i_l** = I-Anteil des Stromreglers / Current regulator integral component / Composant intégral du régulateur de courant / Componente integrale del regolatore di corrente.
- ⑦ **p_l** = P-Anteil des I-Reglers / Current regulator proportional adjustment / Composant proportionnel du régulateur de courant / Componente proporzionale del regolatore di corrente.
- ⑧ **I_{AN}** = Eichung Stromanzeige / Current monitor e.o.s. adjustment / Réglage de l'échelle de l'indicateur de courant / Fondo scala dell'indicatore di corrente.
- ⑨ **DT_N** = Eichung Drehzahlanzeige / Speed monitor e.o.s. adjustment / Réglage de l'échelle de l'indicateur tachymétrique / Fondo scala dell'indicatore tachimetrico.
- ⑩ **I_{DN}** = Strombegrenzung / Current limit / Limitation de courant / Limite di corrente.
- ⑪ **Rxl** = Rxl Kompensation / Rxl Compensation / Compensation Rxl / Compensazione Rxl.
- ⑫ **n ≥ 0** = Drehzahl ≥ 0 / ≥ 0 speed monitor / Signalisation de vitesse ≥ 0 / Soglia di velocità ≥ zero.
- ⑬ **- a** = Auslaufzeit / Deceleration time / Temps de décélération / Tempo di decelerazione.
- ⑭ **+ a** = Hochlaufzeit / Acceleration time / Temps d'accélération / Tempo di accelerazione.
- ⑮ Offset **n** = Offsetabgleich des n-Reglers / Speed regulator offset compensation / Compensation d'offset du régulateur de vitesse / Offset del regolatore di velocità.
- ⑯ Offset **2** = Offsetabgleich des n=0 Diskriminators / Speed=0 comparator offset compensation / Compensation d'offset du comparateur de référence=0 / Offset del rilevatore di velocità=0.
- ⑰ Offset **3** = Offsetabgleich des Sollwert=0 Diskriminators / Reference=0 comparator offset / Compensation d'offset du comparateur de référence=0 / Offset del rilevatore di riferimento=0.

Leuchtdioden / Leds / Diodes lumineuses / Diodi luminosi

- ⑱ **I_{dN}** = Strombegrenzung erreicht / Operation in current limit / Fonctionnement au courant limite / Funzionamento in limite di corrente.
- ⑲ **RSH** = ±10V Kurzschluss / ±10V short circuit / ±10V court-circuit / ±10V corto circuito.
- ⑳ **I_A=0** = Ankerstrom=0 / Armature current=0 / Courant d'induit=0 / Corrente d'armatura=0.
- ㉑ **AL** = Alarm Stromrichter / Alarm drive / Variateur en alarme / Convertitore in allarme.
- ㉒ **RV** = Drehzahl ≥ 0 / Speed ≥ 0 / Vitesse ≥ 0 / Velocità ≥ 0.
- ㉓ **AR** = Alarm Regler / Alarm regulator / Alarme régulateur / Allarme regolatore.
- ㉔ **BAG** = Sollwertintegrator gesperrt / Ramp function disabled / Blocage de la rampe / Blocco della rampa.
- ㉕ **AF** = Alarm Sicherungen Leistungsteil / Alarm fuses power board / Alarme fusibles partie de puissance / Allarme fusibili parte di potenza.
- ㉖ **BLG** = Reglerteil gesperrt / Regulation section disabled / Blocage de la régulation / Blocco della regolazione.
- ㉗ **SI** = Zündimpulse gesperrt / Firing pulses disabled / Blocage des impulsions / Soppressione impulsi.
- ㉘ **± 15** = ± 15V Versorgungsspannung vorhanden / ± 15V voltage supply / Tension d'alimentation ± 15V / Tensione d'alimentazione ± 15V.

Sicherungen / Fuses / Fusibles / Fusibili

- ㉙ **F1/F2** = 1,6 A 250V ∅ 5 × 20 Wickmann (FF n. 19230) überlink / semiconductor / ultrarapides / extrarapidi
- ㉚ **F7/F8/F9** = 0,25A 500V ∅ 6,3 × 32 Navy/Omega
- ㉛ **F11/F12/F13** = 4A 500V ∅ 6,3 × 32 Navy/Omega

4. **Elektrischer Anschluss / Electrical connection / Raccordement électrique / Collegamento elettrico**

4.1 Der Anschluss des Stromrichters ist gemäss dem Anschluss Schaltbild durchzuführen. Die mit $\text{---}\oplus$ bezeichneten Leitungen sind abzuschirmen und die Schirme einseitig zu Erden. ($\varnothing \geq 0,5 \text{ mm}^2$)

The converter connections have to be wired according to the connection diagram; all wires identified by $\text{---}\oplus$ have to be shielded and the shield must be connected to ground at the converter side only. ($\varnothing \geq 0,5 \text{ mm}^2$)

Le raccordement du variateur doit être réalisé selon le schéma; tous les conducteurs marqués par $\text{---}\oplus$ doivent être protégés par un blindage, qui doit être mis à la terre de la côté du variateur seulement. ($\varnothing \geq 0,5 \text{ mm}^2$)

Il collegamento del convertitore deve essere eseguito secondo lo schema d'inserzione; tutti i conduttori contrassegnati con $\text{---}\oplus$ devono essere schermati e lo schermo va messo a terra solo dal lato del regolatore. ($\varnothing \geq 0,5 \text{ mm}^2$)

4.2 **Achtung! Vor dem Einschalten des Stromrichters:**

- Überprüfen der Anschlussspannung (siehe Punkt 5).
- Stellung der Mikroschalter SW... mit Tabelle 4.2.1 überprüfen.
- Überprüfung der extern anzuordnenden **überflinken** Sicherungen. Es dürfen nur die in Tabelle 4.2.2 angegebenen Typen eingesetzt werden.
- Für besondere Anwendungsfälle siehe Betriebsanweisung.

Caution! Before making converter connection:

- Check that the line voltage corresponds to the voltage on the serial tag (paragraph 5).
- Check that the SW... dip-switches position is correct (table 4.2.1).
- Check that the **semiconductor** fuses meet the specifications of table 4.2.2.
- For special applications refer to instruction manual.

Attention! Avant la mise sous tension du variateur:

- Vérifier que la tension d'alimentation corresponde à la plaque signalétique du variateur (paragraphe 5).
- Contrôler que la position des dip-switches SW... corresponde au tableau 4.2.1.
- Contrôler que les fusibles **ultrarapides** montés correspondent aux spécifications du tableau 4.2.2.
- Pour applications particulières consulter le manuel d'instruction.

Attenzione! Prima di dar tensione al convertitore:

- Verificare che la tensione di linea corrisponda a quella di targa del convertitore (paragrafo 5).
- Controllare che la posizione dei dip-switches SW... corrisponda alla tabella 4.2.1.
- Controllare che i fusibili **extrarapidi** montati corrispondano a quelli specificati nella tabella 4.2.2.
- Per applicazioni particolari è necessario consultare il relativo manuale d'istruzione.

Tabelle / Table / Tableau / Tabella 4.2.1

STANDARD			STANDARD			STANDARD			STANDARD		
	OFF	ON		OFF	ON		OFF	ON		OFF	ON
SW4 -1	X		SW4 -1			SW5 -1	X		SW5 -1		
-2		X	-2			-2	X		-2		
-3	X		-3			-3	X		-3		
-4		X	-4			-4	X		-4		
-5	X		-5								
-6		X	-6								
-7		X	-7								
-8	X		-8			SW8 -1		X	SW8 -1		
						-2		X	-2		
STANDARD			STANDARD			STANDARD			STANDARD		
	OFF	ON		OFF	ON		OFF	ON		OFF	ON
SW7 -1	X		SW7 -1								
-2		X	-2								
-3	X		-3								
-4	X		-4								
-5	X		-5								
-6		X	-6								

	OFF	ON	*U _{LN}		OFF	ON	*U _{LN}
SW7 -1	X		220/240V	SW7 -1			220/240V
-2		X	380V	-2			380V
-3	X		415V	-3			415V
-4	X		440/460V	-4			440/460V
-5	X		480/500V	-5			480/500V
-6		X		-6			

	OFF	ON
CV3		
CV6		

— Karte	Ry32
— Board	Ry32
— Carte	Ry32
— Scheda	Ry32

*U_{LN} = Netzspannung / Mains voltage / Tension secteur / Tensione di linea

- Für andere SW... siehe andere Punkte
- For other dip-switches see following paragraphs.
- Pour les autres dip-switches voir paragraphes suivants.
- Per i rimanenti dip-switches vedi paragrafi seguenti.

		STANDARD			
		OFF	ON	OFF	ON
SW9	-1		X	SW9	-1
	-2		X		-2

Tabelle / Table / Tableau / Tabella 4.2.2

	Code Code Code Codice	Stück Pieces Pièces Pezzi	EUROPA Jean Müller	USA Gould Shawmut	USA Bussmann
TPy3- ... / ... - 20 -2B	A D	3 2	gRD2/20 gRD2/ 6	A70P 25 A60X5	FWP 25 FWP 5 (FWH 5)
TPy3- ... / ... - 40 -2B	A D	3 2	gRD3/35 gRD2/ 6	A70P 40 A60X5	FWP 40 FWP 5 (FWH 5)
TPy3- ... / ... - 70 -2B	A D	3 2	gRD3/63 gRD2/ 6	A70P 80 A60X5	FWP 80 FWP 5 (FWH 5)
TPy3- ... / ... - 110L-2B	A D	3 2	S00üf1/80/100A/660V gRD2/16	A70P 100 A60X15	FWP 100 FWP 15 (FWH 15)
TPy3- ... / ... - 140L-2B	A D	3 2	S00üf1/80/125A/660V gRD2/16	A70P 150 A60X15	FWP 150 FWP 15 (FWH 15)
TPy3- ... / ... - 185L-2B	A D	3 2	S00üf1/80/200A/660V gRD2/16	A70P 175 A60X15	FWP 175 FWP 15 (FWH 15)
TPy3- ... / ... - 280L-2B	A D	3 2	S1üf1/110/250A/660V gRD2/16	A70P 300 A60X15	FWP 300 FWP 15 (FWH 15)
TPy3- ... / ... - 350L-2B	A D	3 2	S1üf1/110/315A/660V gRD2/16	A70P 350 A60X15	FWP 350 FWP 15 (FWH 15)
TPy3- ... / ... - 420L-2B	A D	3 2	S2üf1/110/400A/660V gRD2/16	A70P 400 A60X15	FWP 400 FWP 15 (FWH 15)
TPy3- ... / ... - 500L-2B	A D	3 2	S2üf1/110/500A/660V gRD2/16	A70P 500 A60X15	FWP 500 FWP 15 (FWH 15)
TPy3- ... / ... - 650L-2B	A D	3 2	S2üf1/110/630A/660V gRD2/16	A70P 600 A60X15	FWP 600 FWP 15 (FWH 15)
TPy3- ... / ... - 900L-2B	C D	6 2	G3Müf1/630A/660V gRD2/30	— A60X30	— FWP 30 (FWH 30)
TPy3- ... / ... -1200L-2B	C D	6 2	G3Müf1/800A/660V gRD2/30	— A60X30	— FWP 30 (FWH 30)
TPy3- ... / ... -1600L-2B	C D	6 2	G3Müf1/1000A/660V gRD2/30	— A60X30	— FWP 30 (FWH 30)
TPy3- ... / ... -2000L-2B	C D	12 2	G3Müf1/710A/660V gRD2/30	— A60X30	— FWP 30 (FWH 30)
TPy3- ... / ... -2500L-2B	C D	12 2	G3Müf1/800A/660V gRD3/35	— A60X35	— FWP 35 (FWH 35)
TPy3- ... / ... -3000L-2B	C D	12 2	G3Müf1/1000A/660V gRD3/35	— A60X35	— FWP 35 (FWH 35)

- A = Externe Eingangssicherungen / External input fuses / Fusibles d'entrée externes / Fusibili d'ingresso esterni.
- C = Interne Zweigsicherungen / Internal branch fuses / Fusibles de branche internes / Fusibili di ramo interni.
- D = Externe Feldsicherungen / External field fuses / Fusibles de champ externes / Fusibili di campo esterni.

4.3 Anschlussklemmen, Eich-und Kontroll-Bauelemente befinden sich auf den unten bezeichneten Karten:

Py32...	Leistungsteil	Sy3	Versorgungsteil
Ry32	Reglerteil	Fy...	Feldversorger

Connection terminal strips, control, and adjustment components, are mounted on following boards:

Py32...	Power board	Sy3	Supply board
Ry32	Regulation board	Fy...	Field supplier

Les bornes de raccordement, les composants de contrôle et d'étalonnage sont montés sur les cartes suivantes:

Py32...	Carte de puissance	Sy3	Carte alimentateur
Ry32	Carte de régulation	Fy...	Carte alimentation du champ

Le morsettiere di collegamento, i componenti di controllo e taratura sono disposti sulle schede:

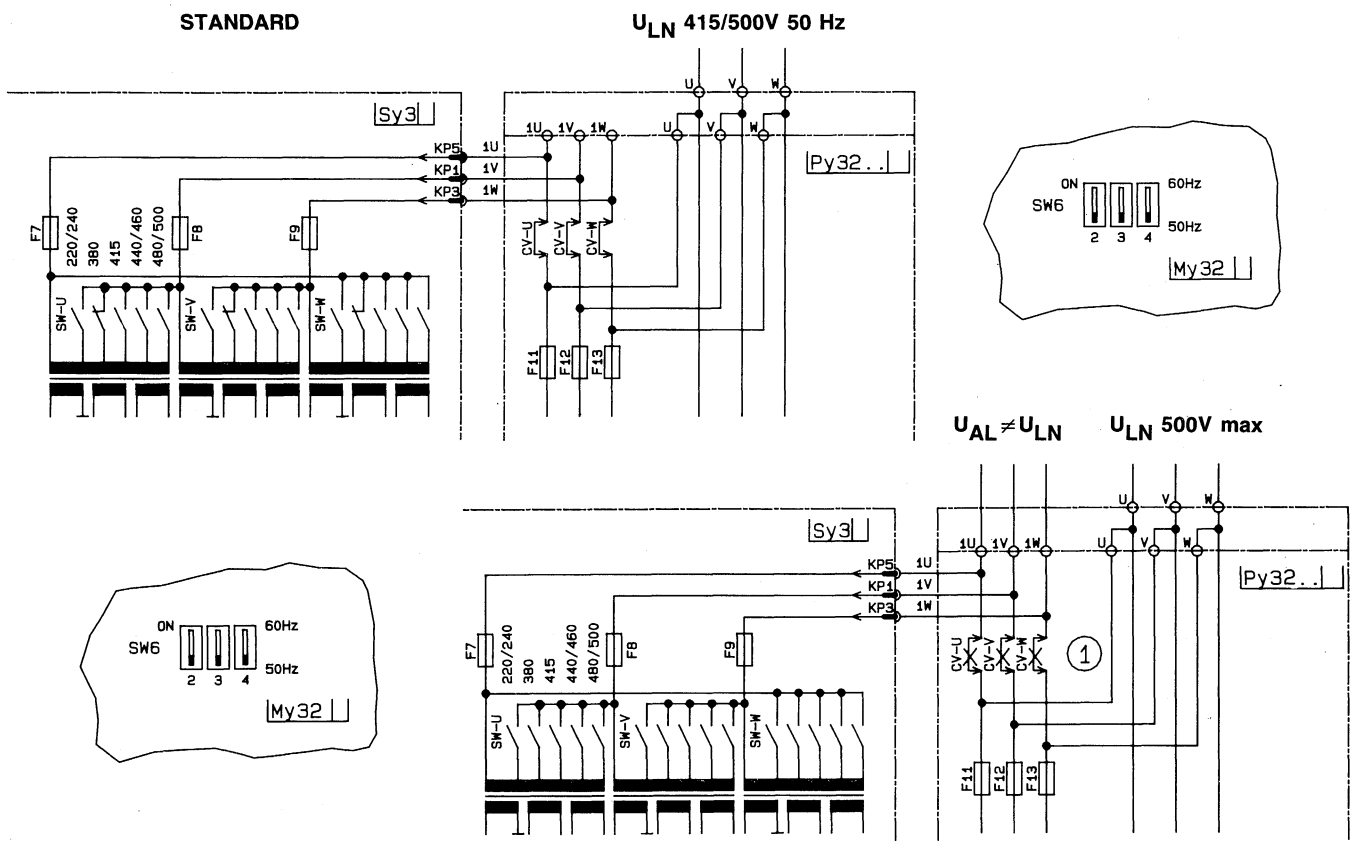
Py32...	Scheda di potenza	Sy3	Scheda alimentazione
Ry32	Scheda di regolazione	Fy...	Scheda alimentazione campo

5. **Stromrichter-einspeisung / Converter supply / Alimentation du variateur / Alimentazione del convertitore.**

U_{AL} Versorgungsspannung des Reglerteils	$\left. \begin{array}{l} 230V - 10\% \dots 240V + 10\% \\ 380V \pm 10\% \\ 415V \pm 10\% \\ 440V - 10\% \dots 460V + 10\% \\ 480V - 10\% \dots 500V + 10\% \end{array} \right\} 50/60Hz \pm 4\%$
U_{AL} Regulation section supply voltage	
U_{AL} Tension d'alimentation des circuits de régulation	
U_{AL} Tensione d'alimentazione dei circuiti di regolazione	

U_{LN} Netzspannung / Mains voltage / Tension secteur / Tensione di linea	$\left. \begin{array}{l} \min 220V \dots \max 415V \pm 10\% \\ \min 220V \dots \max 500V \pm 10\% \end{array} \right\} 50/60Hz \pm 4\%$
---	---

5.1 Anschlussbilder / Connection diagrams / Schémas de raccordement / Schemi di allacciamento



- ① Bei $U_{AL} \neq U_{LN}$ oder bei getrennter Versorgung von Leistungs- und Reglerteil.
 For $U_{AL} \neq U_{LN}$ or for independent supply of regulation and power section.
 Pour $U_{AL} \neq U_{LN}$ ou pour alimentation séparée de la régulation et de la partie de puissance.
 Per $U_{AL} \neq U_{LN}$ o per alimentazione separata della regolazione dalla parte di potenza.

5.2 Einstellungen / Adjustments / Etalonnages / Tarature

STANDARD						Karte / Board / Carte / Scheda		
		OFF	ON				OFF	ON
SW-U	220/240V	X		220/240V				Sy3 ESE 1592
	380V		X	380V				
SW-V	415V	X		415V				Ry32 ESE 1609
	440/460V	X		440/460V				
SW-W	480/500V	X		480/500V				Py32... ESE...

	OFF (50Hz)	ON (60Hz)		OFF (50Hz)	ON (60Hz)	
SW6 -1	X		SW6 -1			Ry32 ESE 1609
-2	X		-2			
-3	X		-3			
-4			-4			

CV-U	X		CV-U			Py32... ESE...
CV-V	X		CV-V			
CV-W	X		CV-W			

6. **Strombegrenzung / Current limit / Limite de courant / Limite di corrente: I_{dN}**

- Der Nennstromwert des gewählten Stromrichters darf mit dem Potentiometer "I_{dN}" der Karte Ry32 reduziert werden.
- The rated current value of the chosen controller may be decreased by potentiometer "I_{dN}" on board Ry32.
- La valeur nominale de courant du variateur choisie, peut être réduite par le potentiomètre "I_{dN}" sur la carte Ry32.
- Il valore nominale di corrente del convertitore prescelto può essere ridotto col potenziometro "I_{dN}" sulla scheda Ry32.

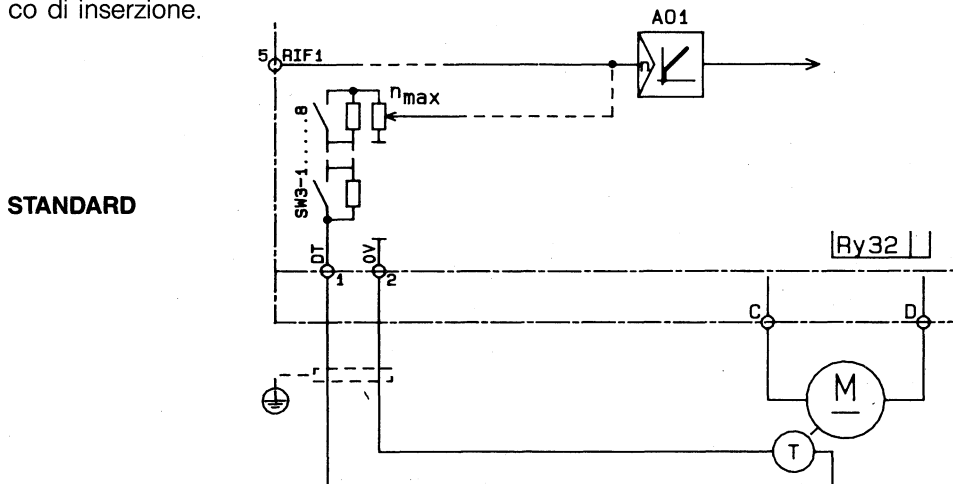
7. **Rxl Kompensation / Rxl Compensation / Compensation Rxl / Compensazione Rxl**

- Mit dem auf Punkt 6 eingestellten Nennstromwert, Potentiometer Rxl so drehen, bis Q_{EN} (Klemme 25) = 0Vdc (Voltmeterbereich ≤ 50mVdc)
- With the adjusted rated current value (point 6), turn potentiometer Rxl until Q_{EN} (terminal 25) is = 0Vdc (Voltmeter range ≤ 50mVdc)
- Avec la valeur de courant nominal réglée au point 6, agir sur le potentiomètre Rxl pour obtenir Q_{EN} (borne 25) = 0Vdc (Voltmètre ≤ 50 mVdc)
- Con il valore di corrente nominale regolato al punto 6, agire sul potenziometro Rxl per ottenere Q_{EN} (morsetto 25) = 0Vdc (Voltmetro f.s. ≤ 50mVdc)

8. **Drehzahl-Istwert / Feedback / Réaction / Reazione**

8.1 Tachoregelung / Tachometer feedback / Réaction tachymétrique / Reazione tachimetrica

8.1.1 Typische Anschlusschaltbild / Typical connection diagram / Schéma typique de raccordement / Schema tipico di inserzione.



8.1.2 Einstellungen / Adjustments / Etalonnages / Tarature

STANDARD 90V

	OFF	ON		OFF	ON
SW3 -1		X	-1		
-2		X	-2		
-3		X	-3		
-4		X	-4		
-5	X		-5		
-6	X		-6		
-7	X		-7		
-8	X		-8		

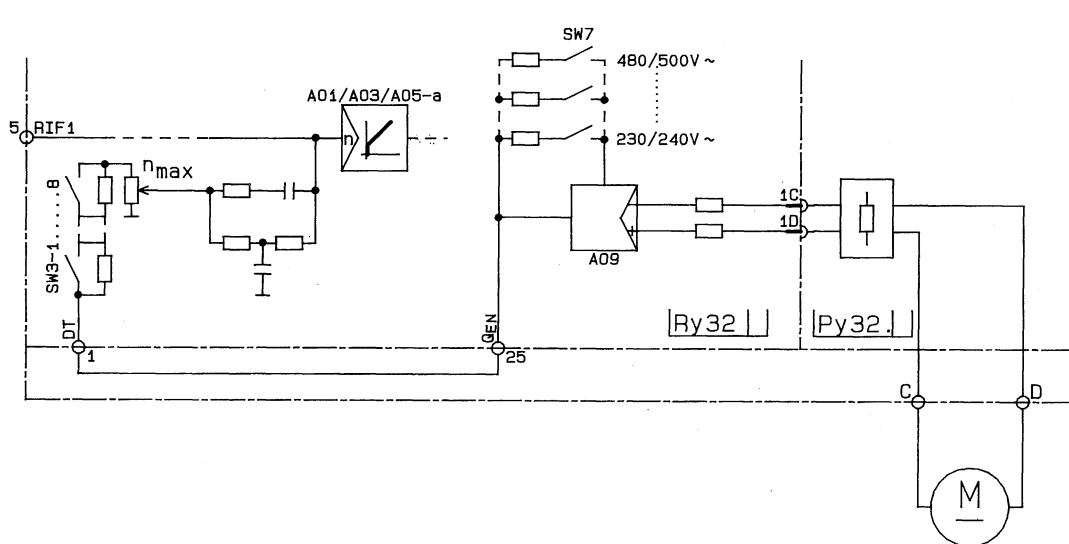
5... 10V	10... 18V	18... 35V	35... 65V	65... 110V	110... 180V	180... 300V
ON	ON	ON	ON	ON	ON	OFF
ON	ON	ON	ON	ON	ON	OFF
ON	ON	ON	ON	ON	OFF	OFF
ON	ON	ON	ON	ON	OFF	OFF
ON	ON	ON	ON	OFF	OFF	OFF
ON	ON	ON	OFF	OFF	OFF	OFF
ON	ON	OFF	OFF	OFF	OFF	OFF
ON	OFF	OFF	OFF	OFF	OFF	OFF

Feinanpassung über n_{max}
 Fine adjustment with n_{max}
 Etalonnage fin par n_{max}
 Taratura fine con n_{max}



8.2 Ankerspannungsregelung mit hochohmiger Ankopplung / High impedance armature feedback / Réaction d'induit à haute impédance / Reazione d'armatura ad alta impedenza

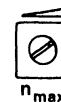
8.2.1 Typisches Anschlussbild / Typical connection diagram / Schéma typique de raccordement / Schema tipico di inserzione



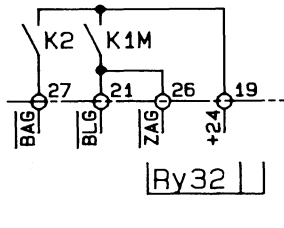
8.2.2 Einstellungen / Adjustments / Etalonnages / Tarature

	OFF	ON
SW3 -1		X
-2		X
-3		X
-4		X
-5		X
-6		X
-7		X
-8		X

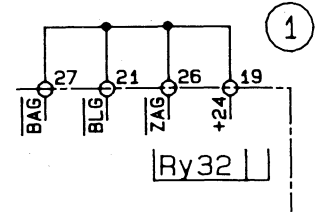
Feinanpassung über n_{max}
 Fine adjustment with n_{max}
 Etalonnage fin par n_{max}
 Taratura fine con n_{max}



9. **Reglerfreigabe / Regulation enable / Déblocage de la régulation / Sblocco della regolazione**



K1M K2	
OFF	Gesperrt / Disabled Blocagé / Bloccato
ON	Freigegeben / Enabled Déblocagé / Sbloccato



BLG : Reglerfreigabe / Regulation enable / Déblocage de la régulation / Sblocco della regolazione.

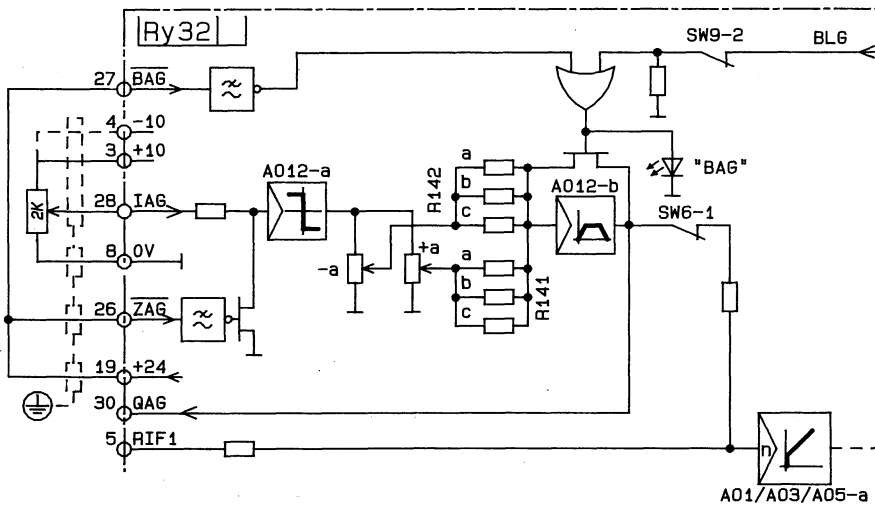
BAG : Integrator Freigabe / Ramp function enable / Déblocage de l'intégrateur de valeurs affichées / Sblocco circuito di rampa.

ZAG : Sollwert Freigabe / Reference enable / Déblocage de la référence / Sblocco ingresso rampa.

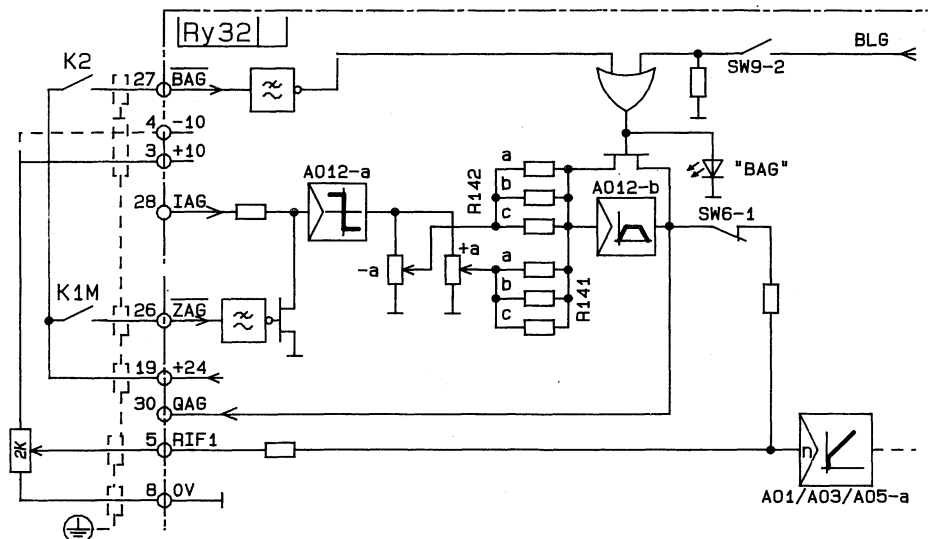
① { Nur bei Standardeinspeisung (siehe Punkt 5.1)
In case of standard supply only (see paragraph 5.1)
Seulement en cas d'alimentation standard (voir paragraphe 5.1)
Solo nel caso di alimentazione standard (vedi paragrafo 5.1).

10. **Sollwertintegrator / Ramp function generator / Rampe d'accélération / Accelerazione graduale**

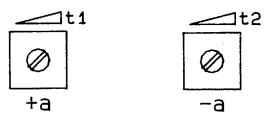
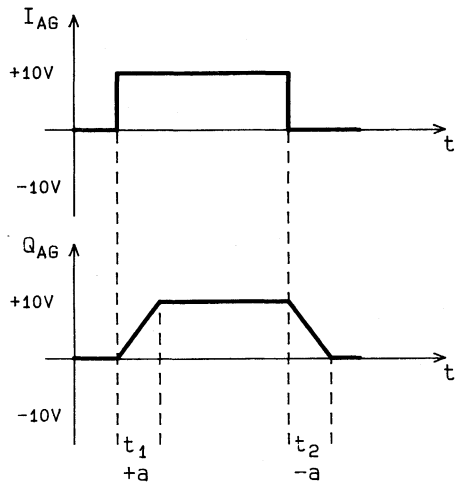
10.1 Typisches Anschlussbild / Typical connection diagram / Schéma typique de raccordement / Schema tipico di inserzione.



STANDARD

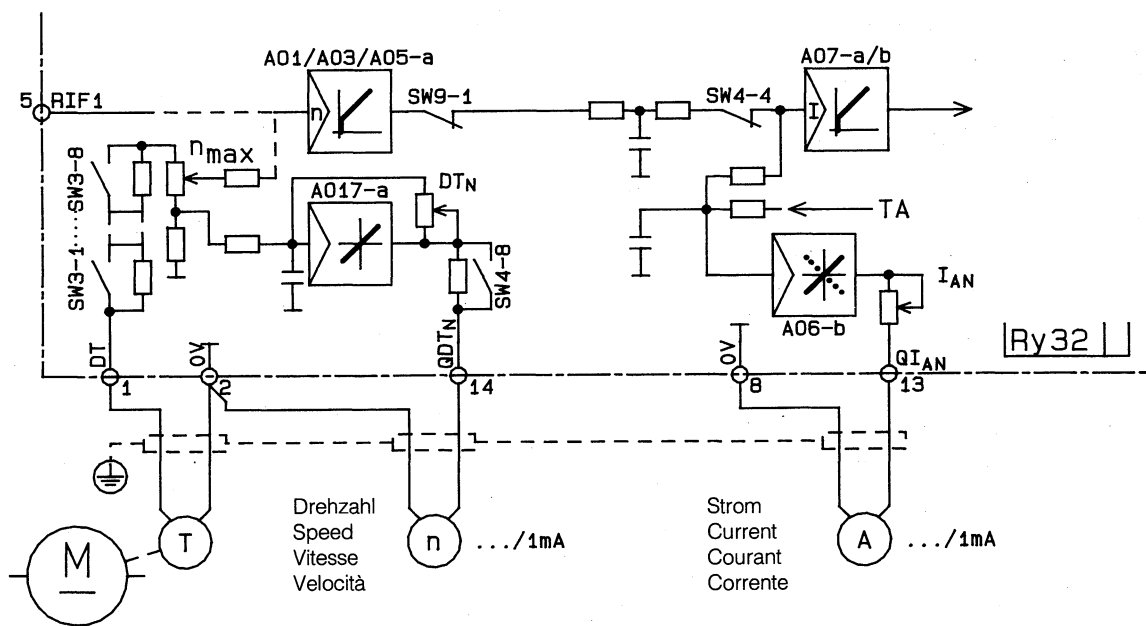


10.2 Einstellungen / Adjustments / Etalonnages / Tarature

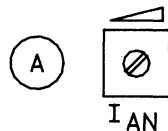
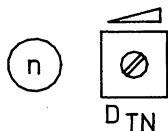


	STANDARD		
	<input type="checkbox"/> t1 0, 5... 5s	<input type="checkbox"/> t2	<input type="checkbox"/> t1 t2 3... 30s 15... 150s
R141a = 4.7MΩ R142a = 4.7MΩ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R141b = 1.2MΩ R142b = 1.2MΩ	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
R141c = 220KΩ R142c = 220KΩ	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

11. Anzeigegeräteanschluss / Monitoring instruments connection / Raccordement des instruments de mesure / Collegamento degli strumenti di misura.

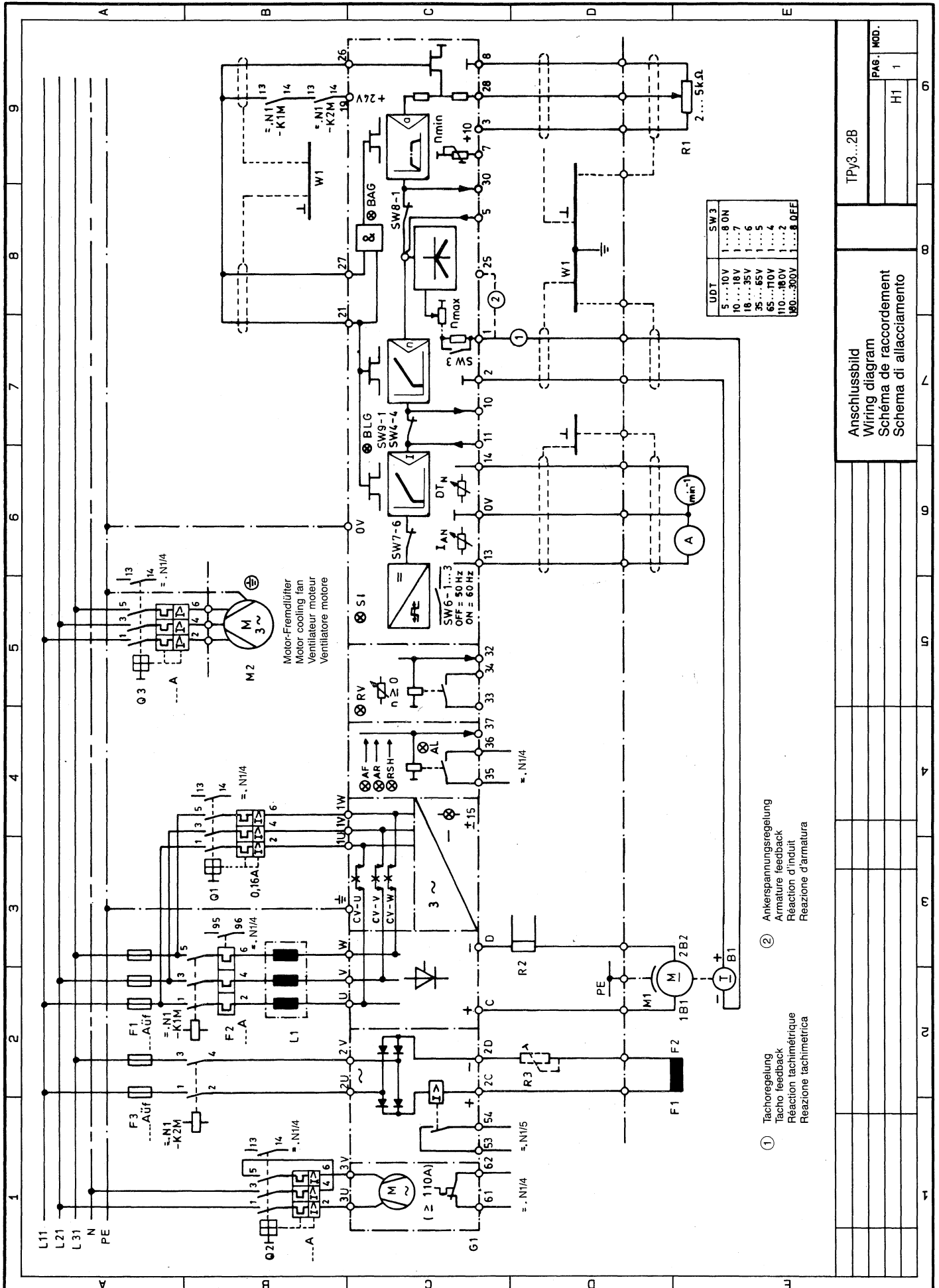


Eichung mit /
Adjustment with /
Etalonnage par /
Taratura con



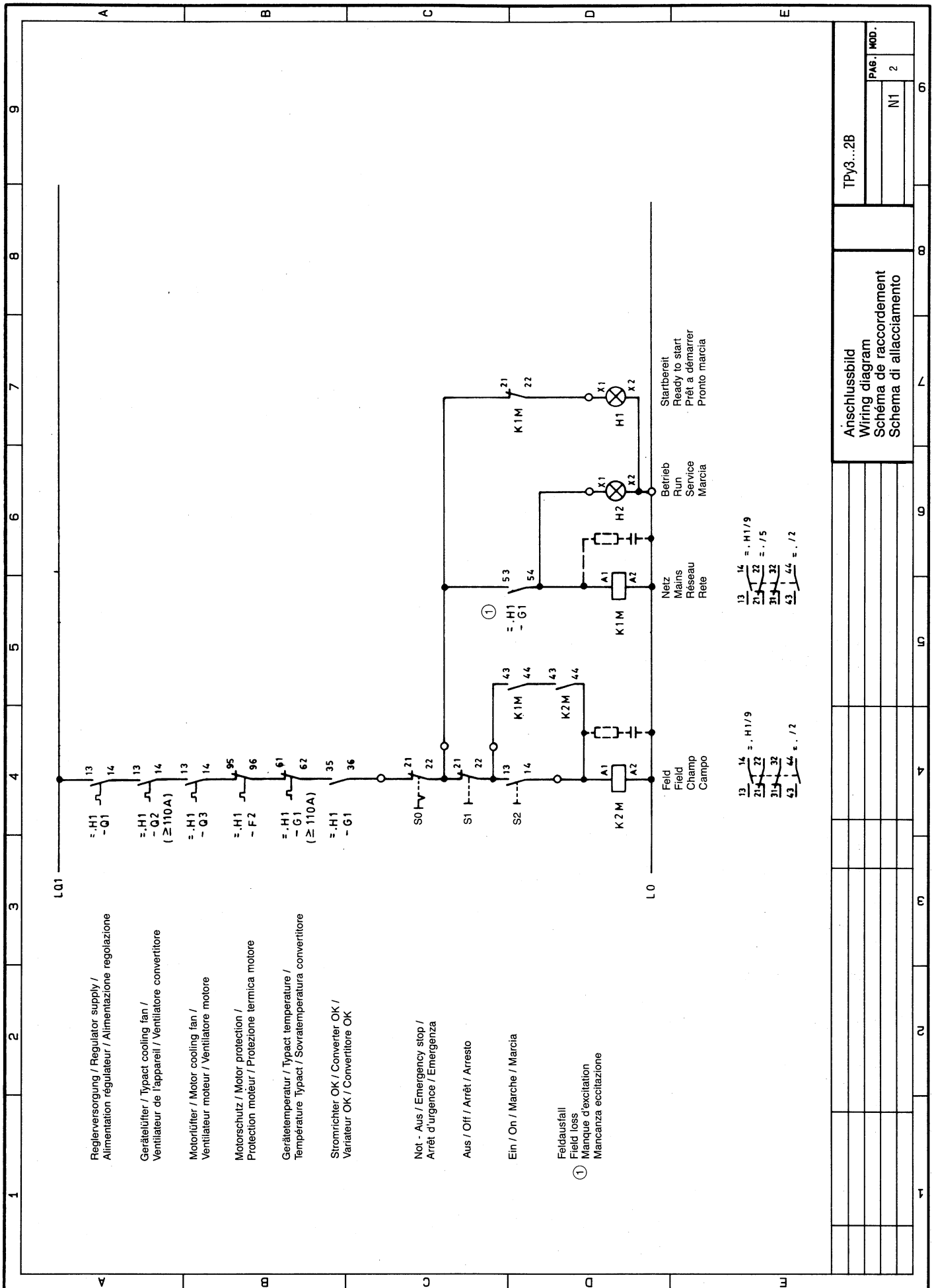
SW4 - 8	OFF	ON
	X	

12. Elektrischer Anschluss / Electrical wiring / Raccordement électrique / Schema tipico di allacciamento.

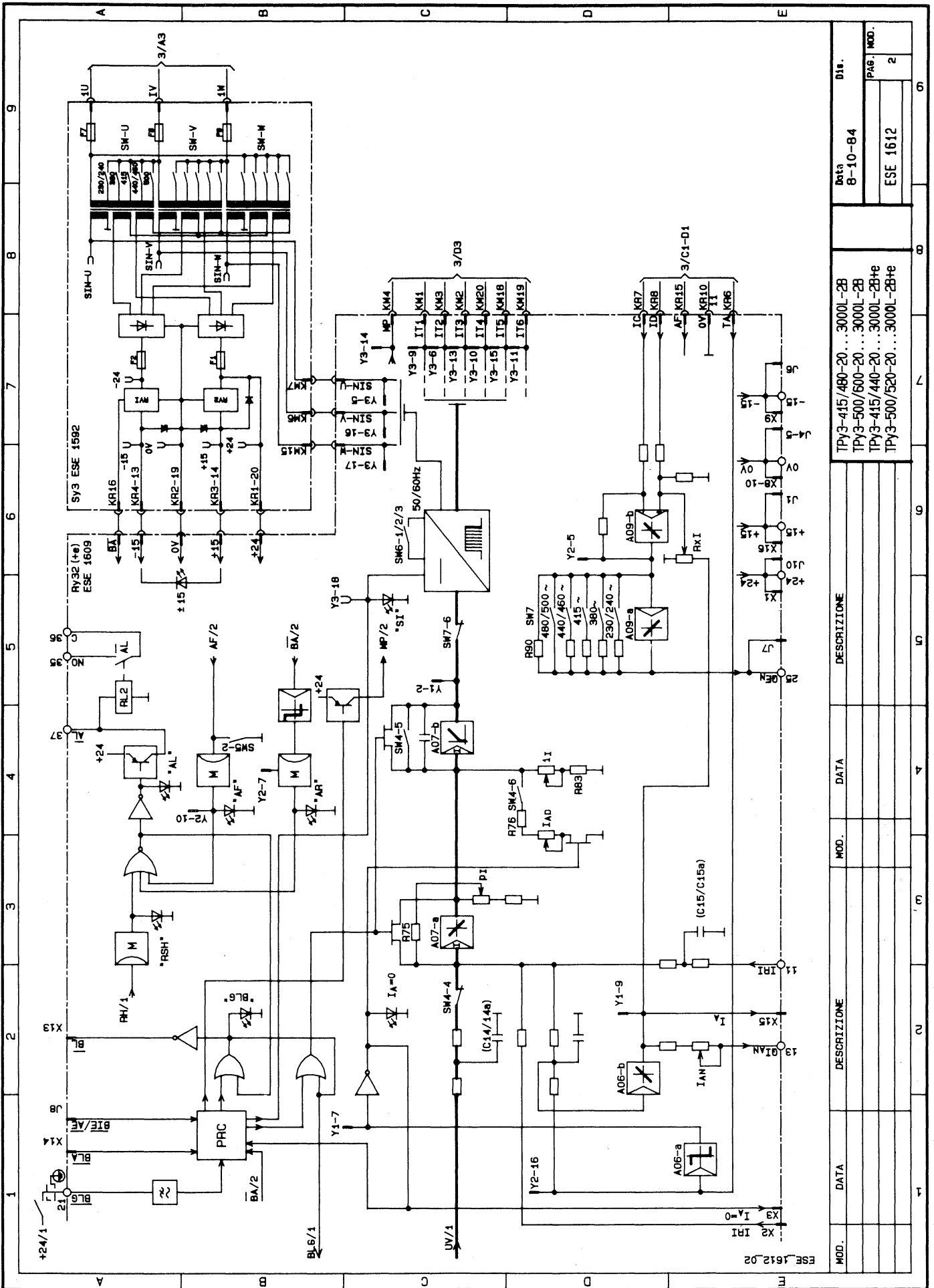


- ① Tachoregulation
Tacho feedback
Réaction tachimétrique
Reazione tachimetrica
- ② Ankerspannungsregelung
Armature feedback
Réaction d'induit
Reazione d'armatura

Anschlussbild Wiring diagram Schéma de raccordement Schema di allacciamento		TPY3...2B	PAG. MOD.
			H1 1

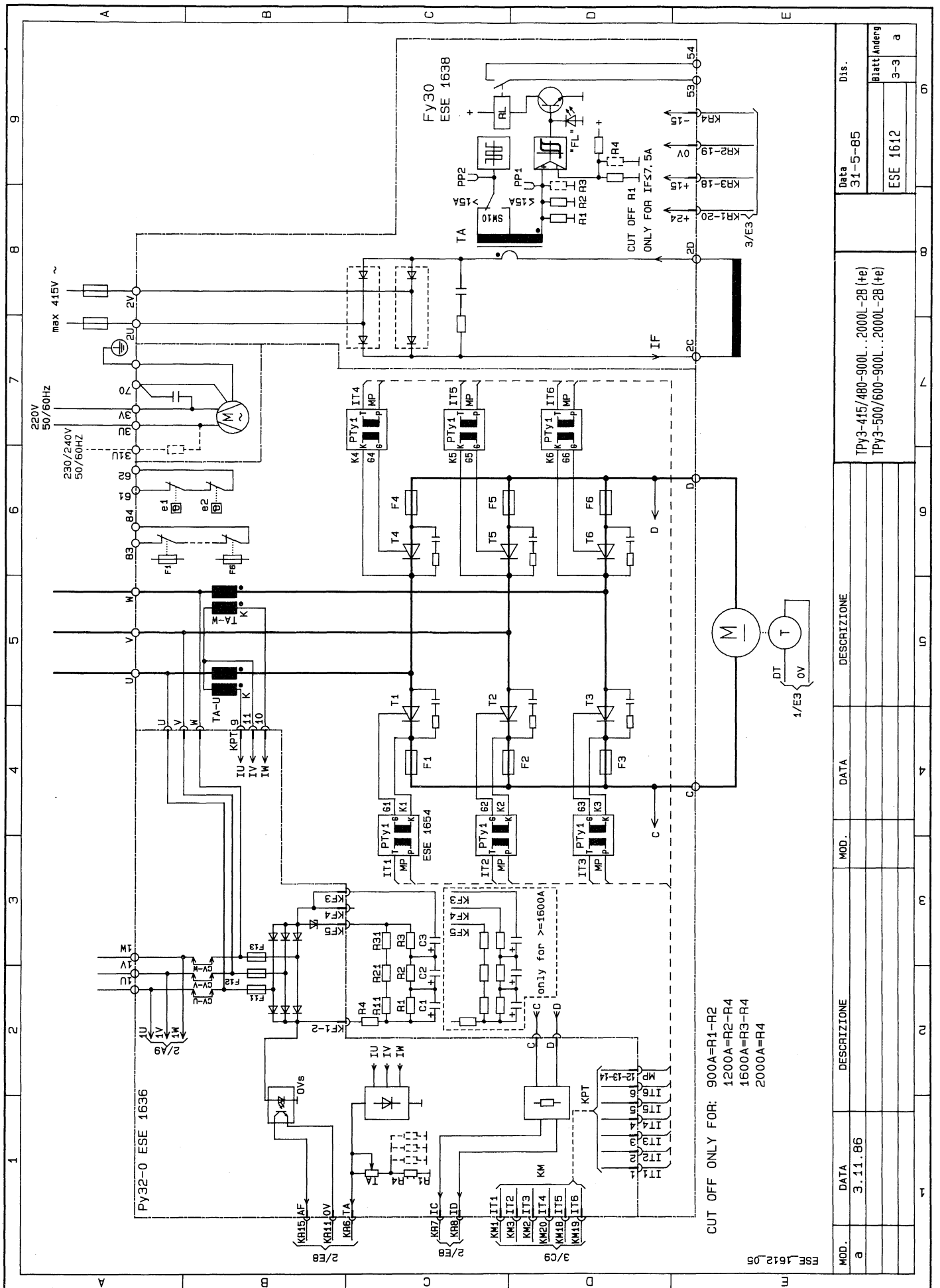


Anschlussbild Wiring diagram Schéma de raccordement Schema di allacciamento		TPY3...2B
PAG.	MOD.	
N1	2	



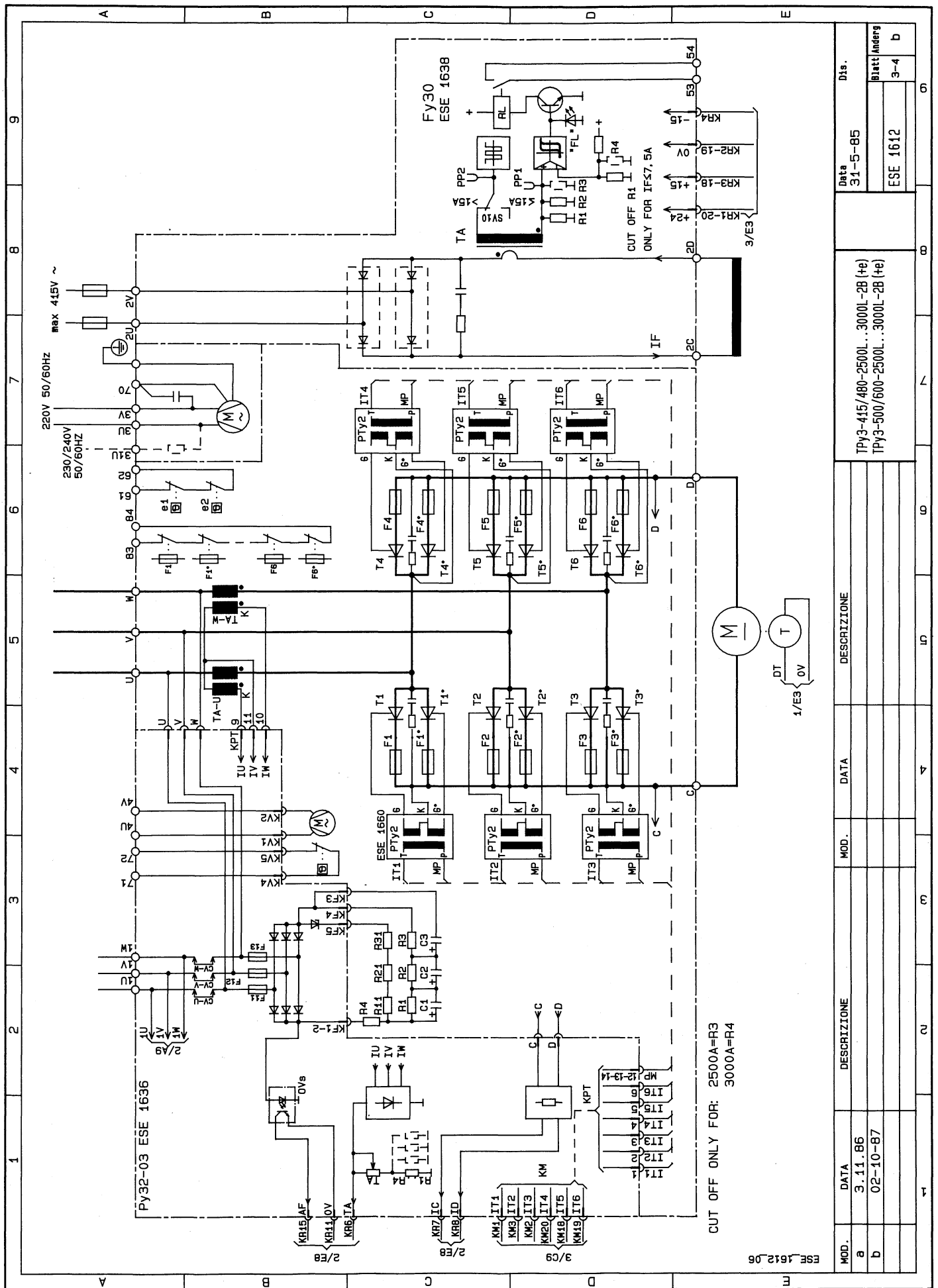
MOD.	DATA	DESCRIZIONE	MOD.	DATA	DESCRIZIONE	Dis.
						8-10-84
						ESE 1612
						2
						6

TPY3-415/460-20...3000L-2B
 TPY3-500/500-20...3000L-2B
 TPY3-415/440-20...3000L-2Bhe
 TPY3-500/520-20...3000L-2Bhe



MOD.	DATA	DESCRIZIONE	MOD.	DATA	DESCRIZIONE	Data	Dis.
a	3.11.86					31-5-85	
						ESE 1612	Blatt/Anderg
							3-3
							a

TPY3-415/480-900L...2000L-2B (He)
 TPy3-500/600-900L...2000L-2B (He)



MOD.	DATA	DESCRIZIONE	MOD.	DATA	DESCRIZIONE
a	3.11.86				
b	02-10-87				
TPY3-415/480-2500L...3000L-2B (+e) TPY3-500/600-2500L...3000L-2B (+e)					
Data 31-5-85 ESE 1612 Blatt Andern 3-4 b					



SIEI

Via Carducci 24
21040 Gerenzano VA – Italia
Tel. +39 – 02.967.601
Fax +39 – 02.968.26.53

Information:
E-mail info@siei.it

Technical Assistance:
E-mail technohelp@siei.it

Internet www.sieigroup.com

SIEI worldwide

Germany:
SIEI-AREG – Gemmrigheim
Tel. +49 – 7143 – 9730
E-mail info@sieiareg.de

France:
SIEI FRANCE – Saverne
Tel. +33 – 3 – 88 02 14 14
E-mail contact@sieifrance.fr

England:
SIEI UK – Telford
Tel. +44 – 1952 – 604555
E-mail sales@sieiuk.co.uk

Slovenia:
SIEI EST – Ljubljana
Tel. +386 – 15 614 940
E-mail ljubljana@sieiest.com

Asia:
SIEI ASIA – Singapore
Tel. +65 – 6 – 8418.300
E-mail info@sieiasia.com.sg

SIEI ASIA – Shanghai
Tel. +86 – 21 – 6916.9898
E-mail info@sieiasia.com.cn

USA:
SIEI AMERICA – Charlotte, NC 28208
Tel. +1 – 704 – 329.0200
E-mail salescontact@sieiamerica.com



SIEI – A member of the GEFTRAN Group.

GEFRAN S.p.A.
Via Sebina 74
25050 Provaglio d'Iseo (BS) – Italia
Tel. +39 – 030.9888.1
Fax +39 – 030.9839063
E-mail info@gefran.com
Internet www.gefran.com

SIEI Customer Service

E-mail customer@siei.it
Tel. +39 – 02.967.60.500
Fax +39 – 02.967.60.278



TPy3-...-2B AWA82-696

09/87



1S3D07