

6.11.3 Fuses in the power interface

Board C98043-A7042:

Wickmann 198 1A / 250 V 5 x 20 mm slow

Wickmann 343 1A / 250 V 6.3 x 32 mm slow

Schurter FSD 1A / 250 V 5 x 20 mm slow, order code 0034.3987

Schurter FST 1A / 250 V 5 x 20 mm slow, order code 0034.3117

Board C98043-A7041:

F 6.3A / 250 V 5 x 20 mm (Fast-Acting Fuse)

e.g.. Wickmann 193,
Littlefuse 217P Series

6.12 Arrangement of printed circuit boards

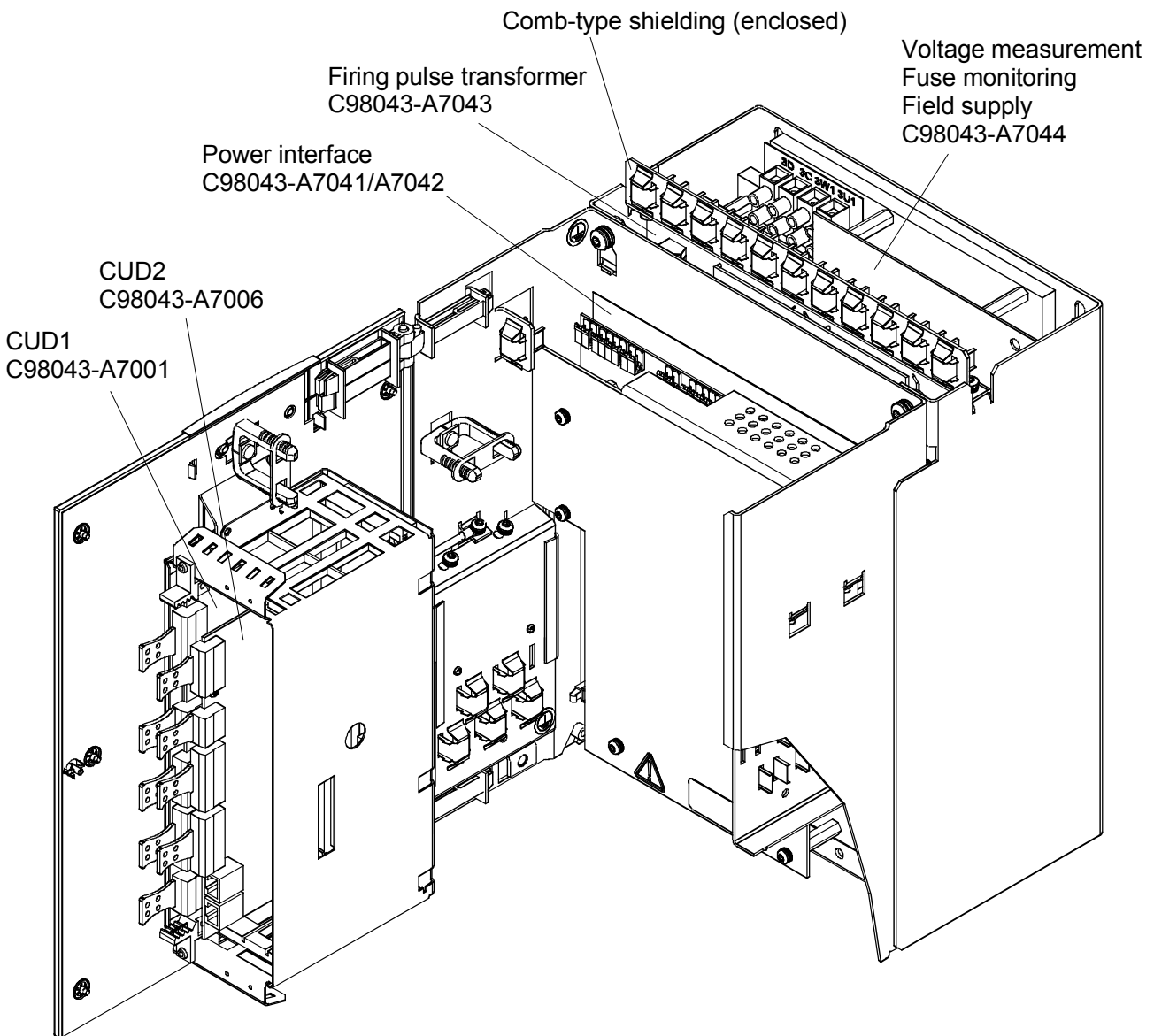


Fig. 6.12.1

6.13 Arrangement of customer connections (terminals, connectors, Faston tabs)

Module C98043-A7001 (CUD1)

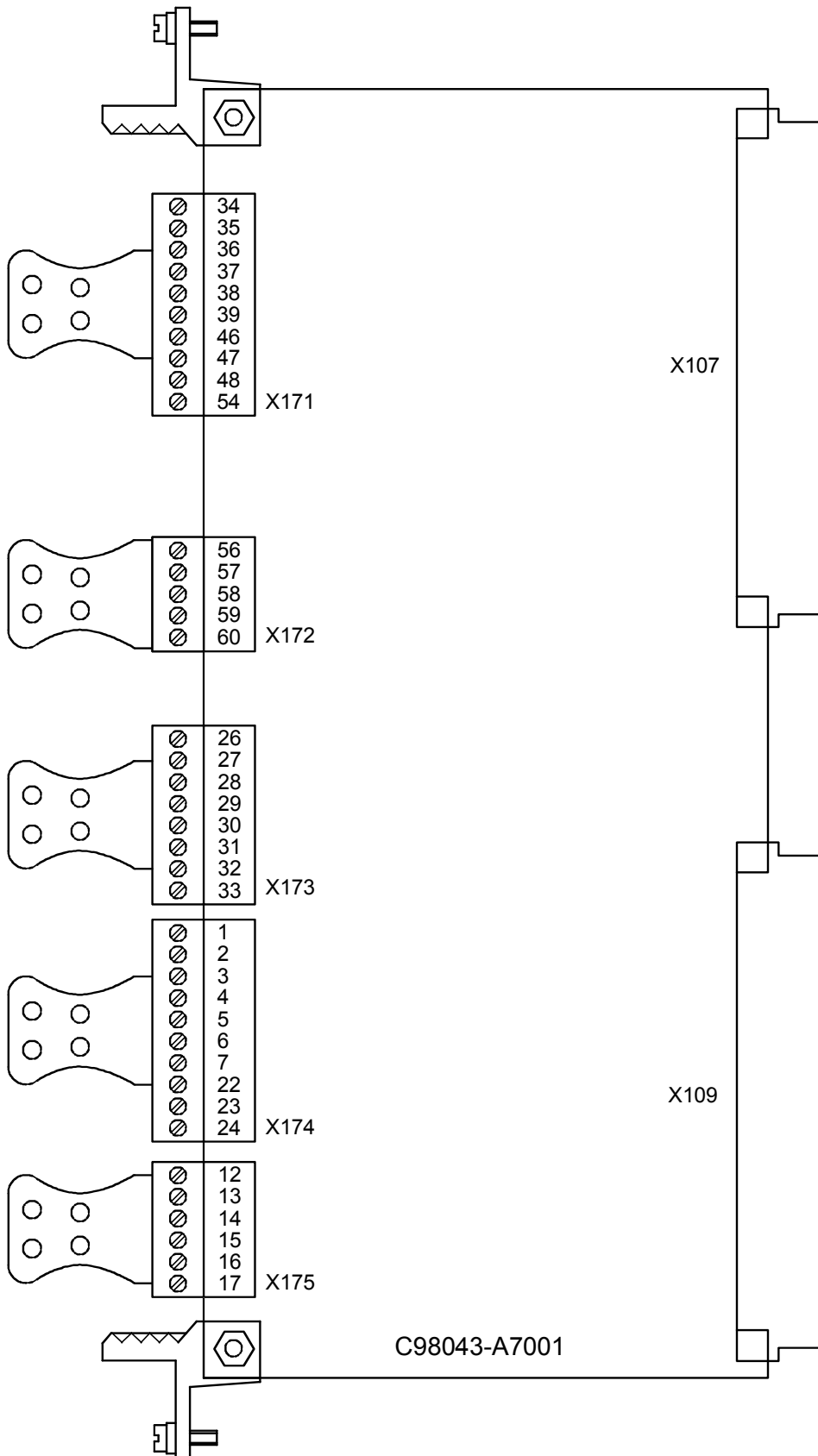


Fig. 6.13.1

Module C98043-A7006 (CUD2)

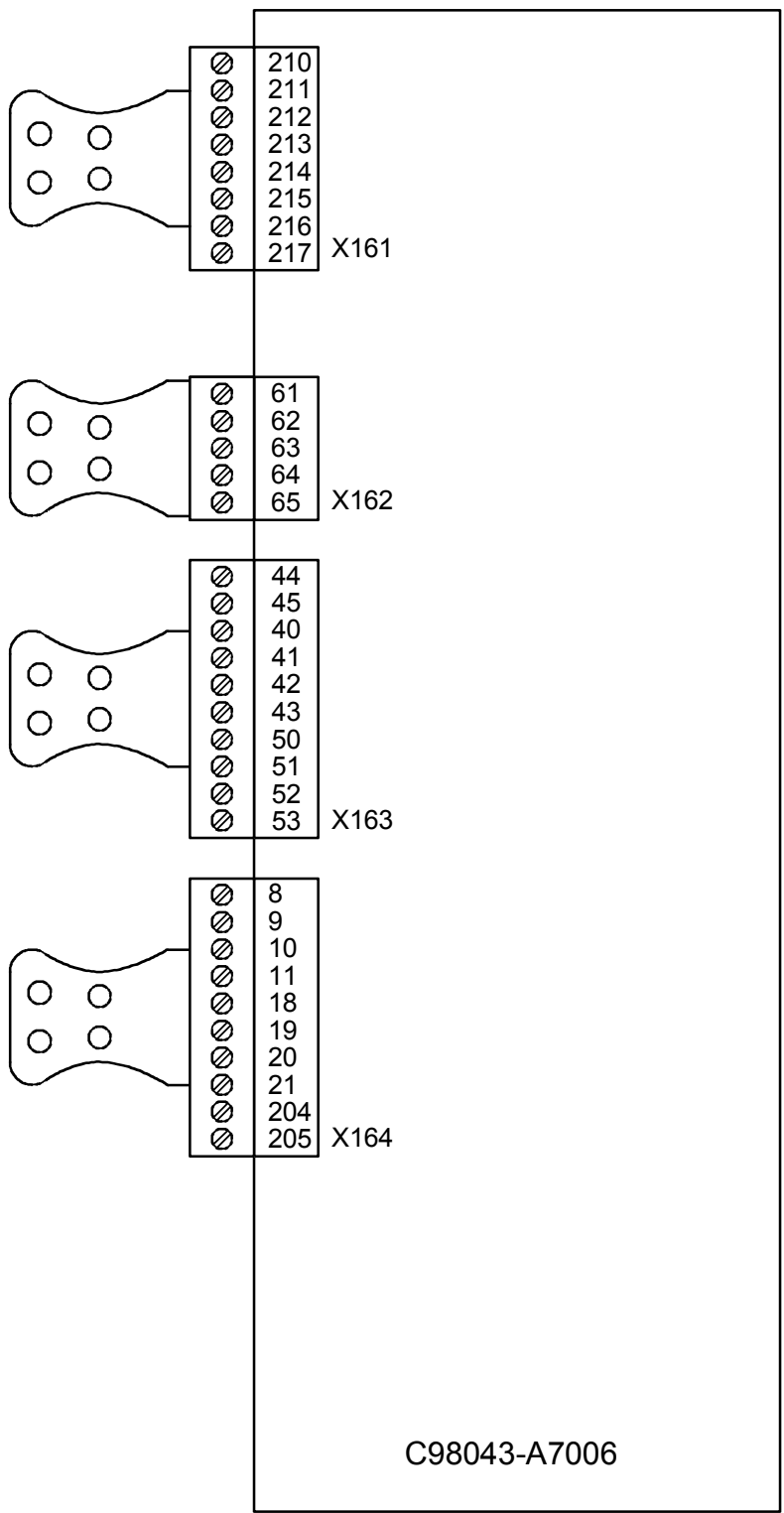


Fig. 6.13.2

Module C98043-A7042

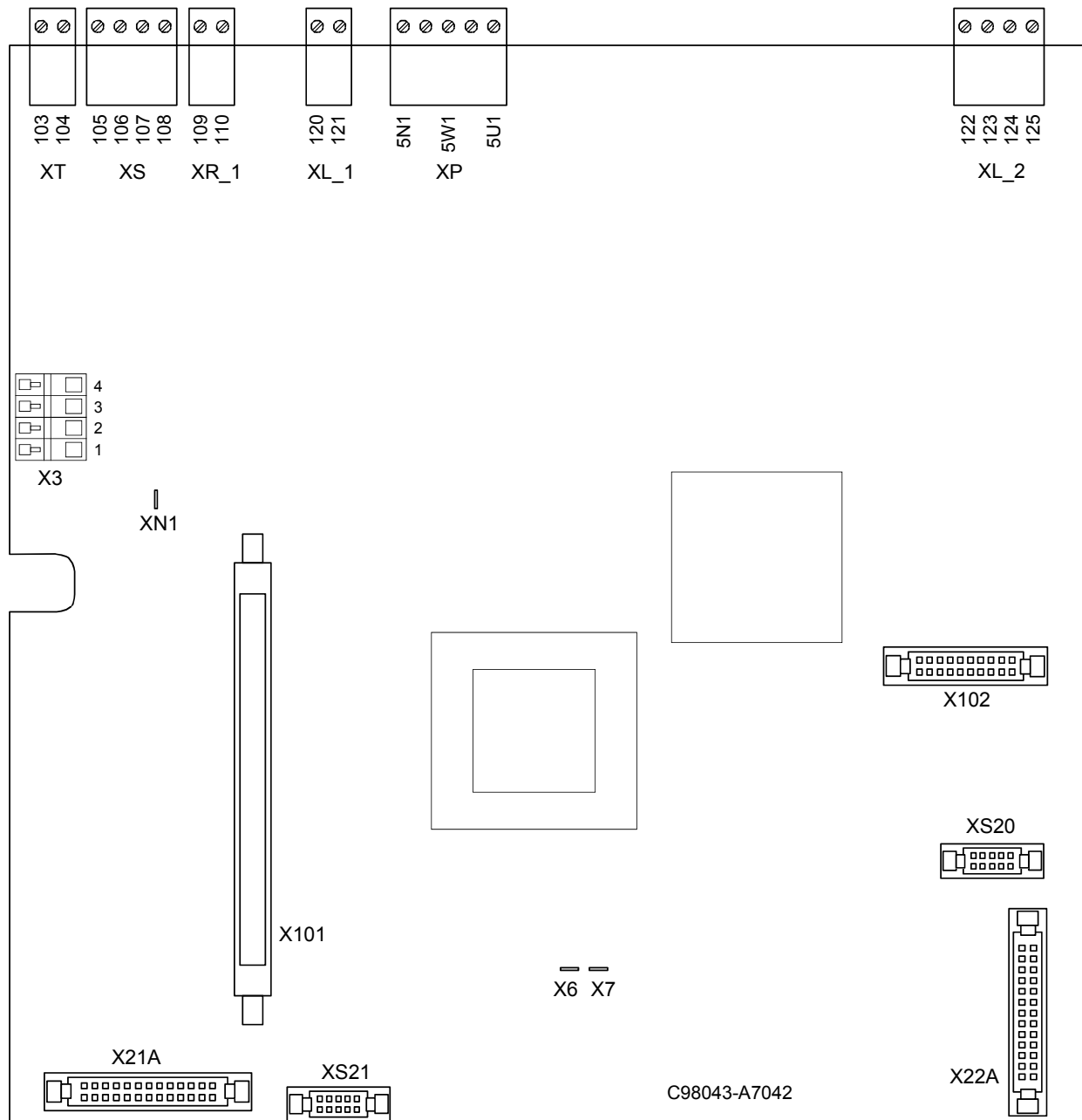


Fig. 6.13.3

Module C98043-A7043

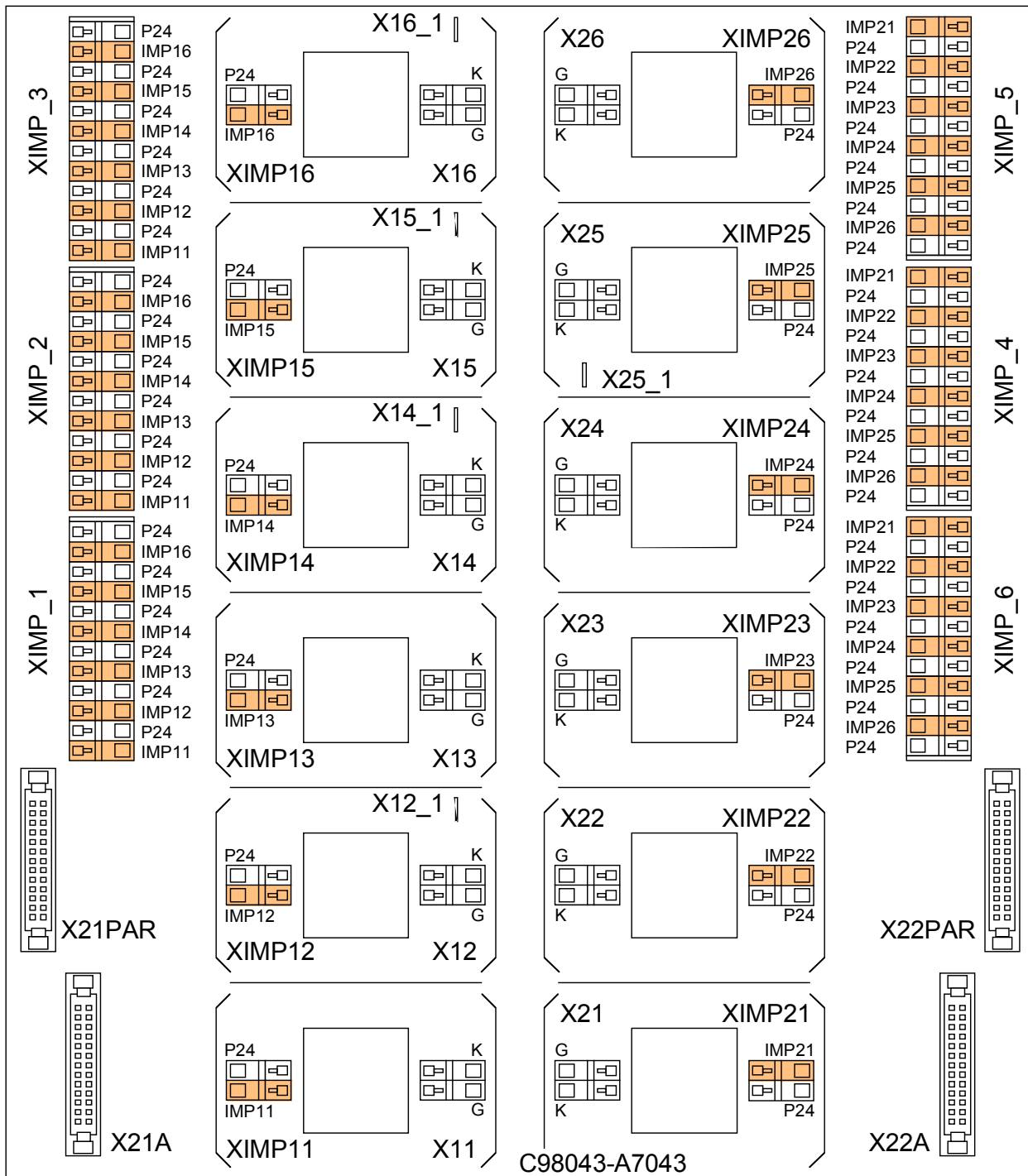


Fig. 6.13.4

Note:

Each of the following connections are connected in parallel:

- Terminals with the same designation on terminal strips XIMP_1, XIMP_2 and XIMP_3
- Terminals with the same designation on terminal strips XIMP_4, XIMP_5 and XIMP_6
- X21A and X21PAR
- X22A and X22PAR

Module C98043-A7044

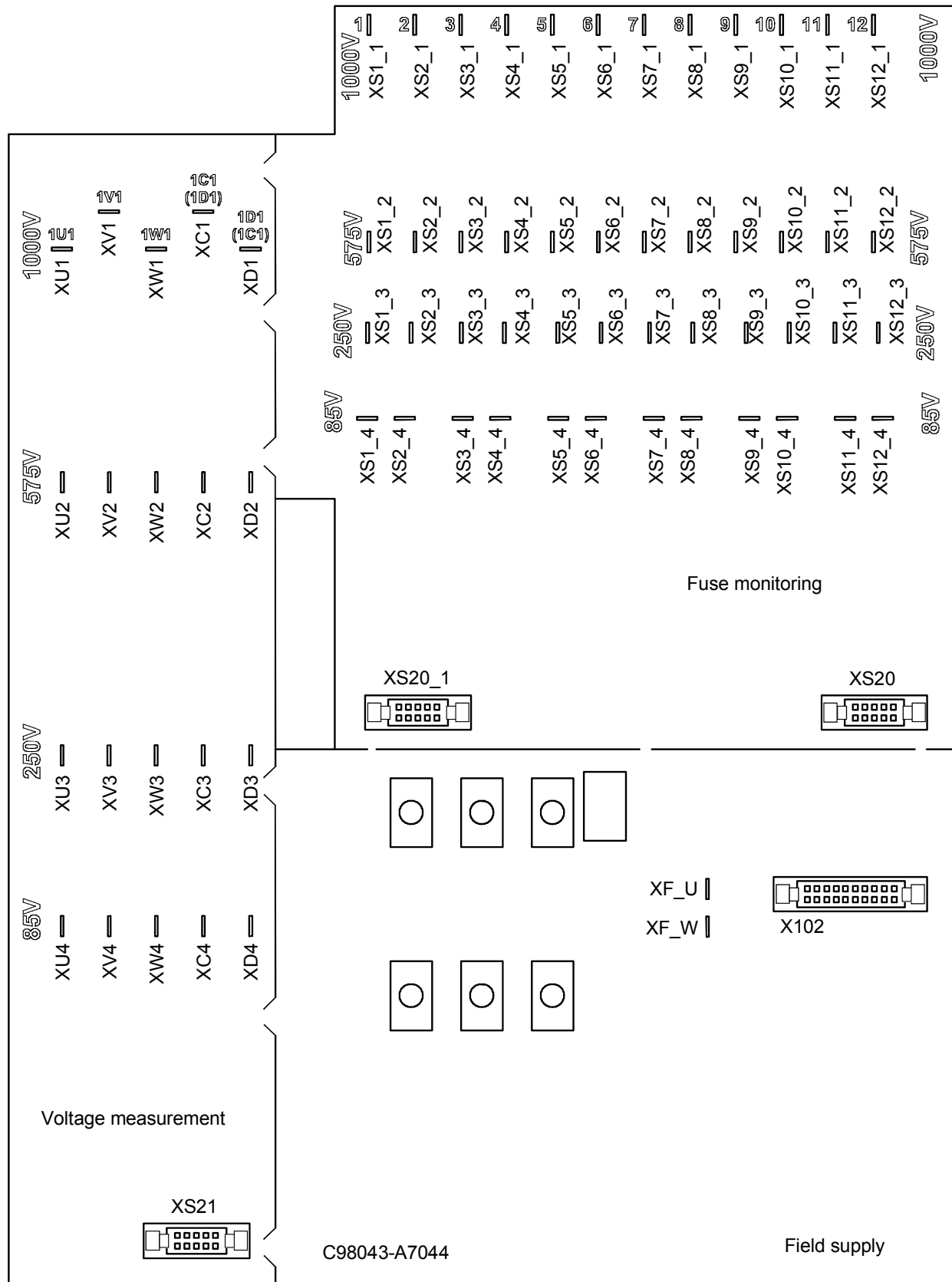


Fig. 6.13.5

Module C98043-A7041

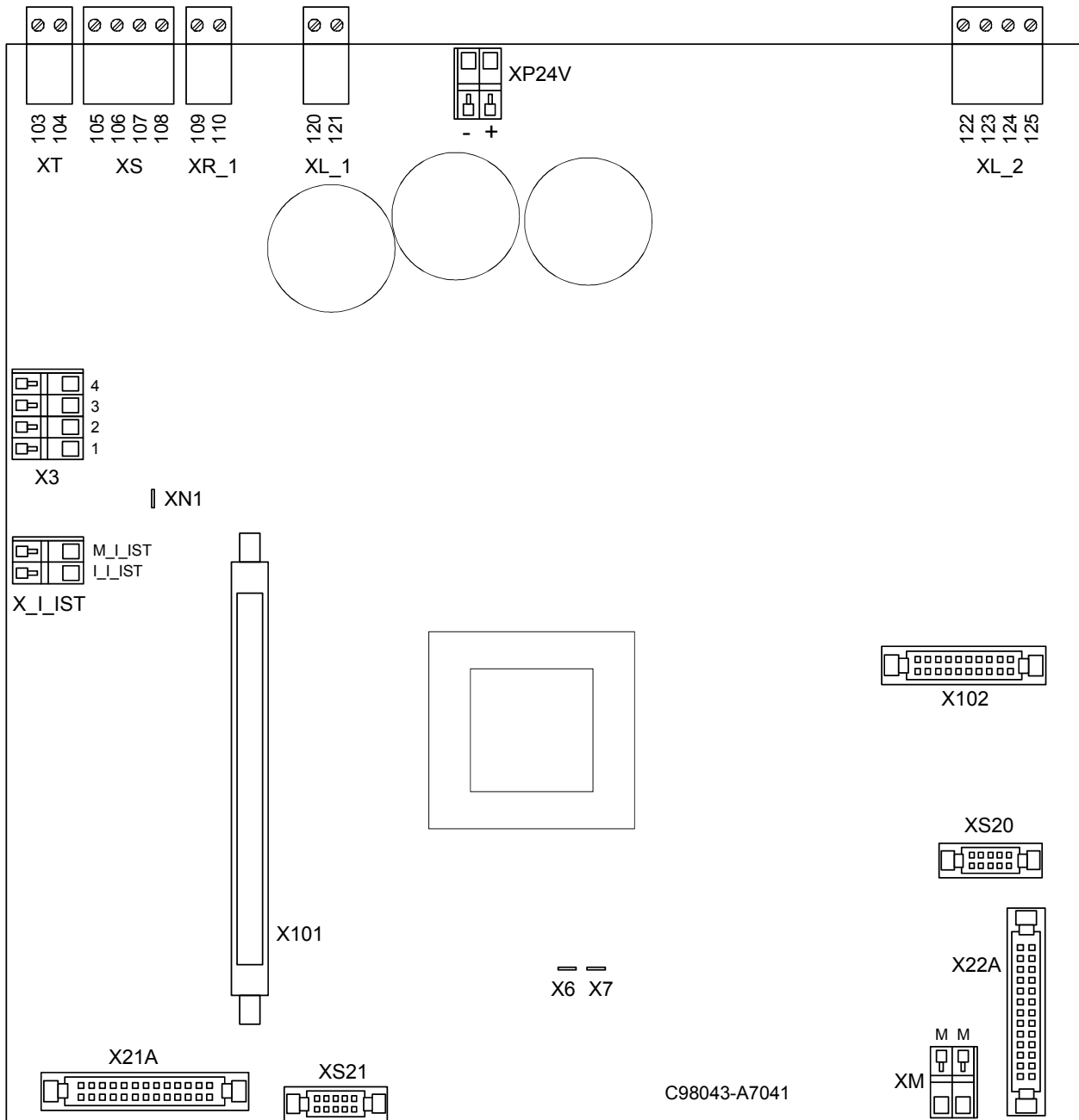




Fig 6.13.6

6.14 Terminal assignment (terminals, Faston tabs, ribbon cables)

 	WARNING
	<p>The converter might sustain serious or irreparable damage if connected incorrectly.</p> <p>The power cables and/or busbars must be secured mechanically with strain relief outside the converter.</p>

Field circuit

Terminal type: European standard terminal strip (screw-type terminal)
maximum conductor cross section 10 mm²

Function	Terminal XF	Connection values/remarks
Supply connection	3U1 3W1	2AC 400V (– 20%), 2AC 460V (+10%)
Field winding connection	3C 3D	Rated DC voltage 325V / 373V For 2AC 400V / 460V supply connection

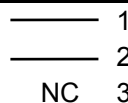
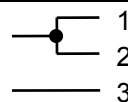
Type of connection: Faston tabs, 6.3mm

Function	Connection	Connection values/remarks
	XF_U XF_W	For conversion of supply voltage measurement (field) to extra-low voltage acc. to Chapter 6.10.2.

Electronics power supply

Terminal type: Type 49 plug-in terminal
Maximum cross-section 1.5mm², finely stranded

Module C98043-A7042 power interface

Function	Connect.	Terminal XP	Connection values/remarks
Incoming supply 400V	 1 2 NC 3	5U1 5W1 5N1	2AC 380V (– 25%) to 460V (+15%); I _n =1A (– 35% for 1min) Internal fusing with F1, F2 (1A medium time lag) on module C98043-A7042 (see Chapter 6.11.3) External fusing max. 6A, characteristic C
or			
Incoming supply 230V	 1 2 3	5U1 5W1 5N1	1AC 190V (– 25%) to 230V (+15%); I _n =2A (– 35% for 1min) Internal fusing with F1, F2 (2 x 1A medium time lag) on module C98043-A7042 (see Chapter 6.11.3) External fusing max. 6A, characteristic C

NOTE

In the case of line voltages which exceed the tolerance range specified in Section 3.4, the electronics supply voltage and the field circuit mains supply connection must be adjusted by means of transformers to the permissible value stated in Section 3.4. It is essential to use an isolating transformer for rated line voltages in excess of 460V.

The rated supply voltage for the armature circuit (index 001) and the field circuit (index 002) must be set in parameter P078.

Open-loop and closed-loop control section

Terminal type: **X171 to X175** Plug-in terminal (screw-type)
 Maximum connection cross-section 1.5mm²

XR_1, XL_1, XS, XT MSTB2.5 plug-in terminal
 Maximum connection cross-section 2.5mm²

Analog inputs - setpoint inputs, reference voltage (see also Section 8, sheet G113)

Module C98043-A7001 (CUD1)

Function	Terminal X174	Connection values/remarks
Reference M P10 N10	1 2 3	} ±1% at 25°C (stability 0.1% per 10°K); 10mA short-circuit-proof
Select input main setpoint + main setpoint -	4 5	
Select input analog 1 + analog 1 -	6 7	
		Input type (signal type) parameterizable: - Differential input ±10V; 150kΩ - Current input 0 - 20mA; 300Ω or 4 - 20mA; 300Ω Resolution can be parameterized up to approx. 555µV (±14bit) Common mode suppression: ±15V

Analog inputs - actual speed inputs, tacho inputs (see also Section 8, sheet G113)

Module C98043- A7041/A7042 power interface

Function	Terminal XT	Connection values/remarks
Tacho connection 8V to 270V	103	±270V; >143kΩ
Ground analog M	104	