EURAX BT 901
19″ rack

Ex and non-Ex versions

Versions

DESCRIPTION	ID
Preferred non-Ex version with **2 grey terminal blocks top** and **bottom**, for max. 2 × 171 **screw** terminals (Figures 2 and 4)	901-1
Non-Ex version with **1 grey terminal block at top** for max. 171 **screw** terminals and **1 metal cover** (**bottom rear**) for mounting **max. six 56-pin multiple connectors** (Figures 2 and 5)	901-2
Preferred Ex version [EEx ia] IIC with **1 blue terminal block at top** for connecting intrinsically safe circuits and **1 grey terminal block at bottom** for non-intrinsically safe circuits, for max. 2 × 171 **screw** terminals (Figures 3 and 4)	901-3
Ex version [EEx ia] IIC with **1 blue terminal block at top** for connecting intrinsically safe circuits to max. 171 **screw** terminals and **1 metal cover (bottom rear)** for mounting **max. six 56-pin multiple connectors** for non-intrinsically safe circuits (Figures 3 and 5)	901-4
Special Ex version [EEx ia] IIC without terminal blocks for the direct connection of **cable** looms to **soldering, wire-wrap** or **Maxi Termipoint** posts	901-5
Special non-Ex versions – **max. 12 multiple connectors** – screw terminals with **soldering** instead of **wire-wrap** posts – **plug-in** terminals instead of **screw** terminals – without terminal block for the direct connection of **cable looms** to **soldering**, **wire-wrap** or **Maxi Termipoint** posts	901-A to 901-H

Refer to publication W 2215 e “Engineering aids” for versions and ordering examples.

Fig. 1

Fig. 2

Fig. 3

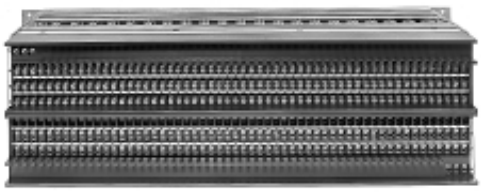


Fig. 4

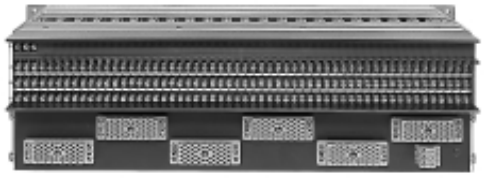


Fig. 5

Application

The 19″ rack **EURAX BT 901** (Figures 1 to 5) is designed to accommodate EURAX plug-in modules in Euro-format 100 × 160 mm in varying widths for measuring, signal processing and alarm monitoring units.

Matching the 100 mm height of the plug-in modules, the rack is 3 HE (standard height units) high, i.e. 132.5 mm, and 84 TE (standard width units) wide, i.e. 426.72 mm. Assuming plug-in modules with a width of 4 TE, this would provide space for 21 modules (Fig. 1). The capacity of up to 21 EURAX modules of high functional density invariably involves a large number of external connections.

The EURAX BT 901 rack meets this requirement. Its modular design enables different versions to be assembled which with a judicious choice of back-plane fittings can accommodate a wide variety of connection facilities for a large number of input and output signals.

EURAX BT 901
19″ rack

Features / Benefits

- **Up to 342 screw terminals or alternatively up to 171 screw terminals plus up to 336 connections via multiple connectors / Provides high-density accommodation for plug-in modules, e.g. up to 21 modules 4 TE wide in a single rack**
- **“Intrinsically safe” [EEx ia] IIC versions so available**
  (see Section “Explosion protection data”)

Technical data

The rack corresponds to the guidelines in DIN 41 494, Part 1, and IEC 297-3.

19″ rack:	Size 3, type V
Internal width:	84 TE (426.72 mm)
Height:	3 HE (132.5 mm)
Slot numbers:	1 to 84
Device insertion:	Guide rails (snap-in)
Equipped with slots for inserting 19″ plug-in modules:	Acc. to IEC 297-3
For Euro-format boards:	100 × 160 mm
Edge connector:	Acc. to DIN 41 612, pattern F
Frontplate:	Acc. to IEC 297-3
Height:	128.4 mm
Connection of instruments:	For voltage and current measurement circuits: Edge connector socket acc. to DIN 41 612, pattern F (32-pin, row z, d or 48-pin, row z, b, d) For heavy current inputs: 6-pole heavy duty connector with current circuit shorting links

Edge connector socket wiring:

Type of connection	Wire gauge
Wire-wrap posts	Tefzel AWG 22
Soldering posts	TQ 0.25 mm^2
Crimped connection (6-pole socket strip for current connector)	Soflex stranded TQ 1.5 mm^2
Maxi Termipoint posts 0.8 × 2.4 (clip 0.8 × 2.4)	0.56 mm^2

Electrical connections to rack BT 901:	Screw terminals with wire guards for max. 2 × 2.5 mm^2 and wire-wrap or soldering posts (for fitting into a terminal block)
56-pin multiple connector:	See Section “Terminals and connectors”
Wiring diagram for the 19″ rack:	Acc. to “Layout and wiring diagram” supplied
Dimensions:	See Section “Dimensioned drawing”
Colour of front and cover plates:	Grey, RAL 7032
Weight (less plug-in modules):	Approx. 4.3 kg with 2 terminal blocks and 21 slots equipped
Protection Class:	IP 00 acc. to EN 60 529 or IP 20 when the front is fully covered, cover plates on the top and bottom and terminal blocks at the rear
Slot coding:	See Section “Coding”
Test voltage:	≥ 2 kV, 50 Hz, 1 min. between all conducting parts and the rack frame 4 kV, 50 Hz, 1 min. assuming the specific device wiring and fitting instructions are observed Rack with 56-pin multiple connectors: – 500 V, 50 Hz, 1 min. between contacts and between all contacts and ground
Application conditions:	The conditions given in the respective price sheet and certificates apply for the electrical connections of the 19″ modules
19″ plug-in modules:	See Section “EURAX plug-in modules” on Page 11 for front plate widths and the measured variables and functions available

Construction

The rack consists essentially of the …

… edge connectors for the plug-in modules

… external inputs and outputs

… back plane wiring.

Edge connectors

There are three types of connectors: 32-pin, 48-pin and 6-pin.

The electrical contact in the case of the 32-pin (Fig. 6) and 48-pin edge connector sockets is indirect and they are therefore used for low-voltage signal circuits. They are mounted in the back plane of the 19″ rack and conform to DIN 41 612, pattern F.

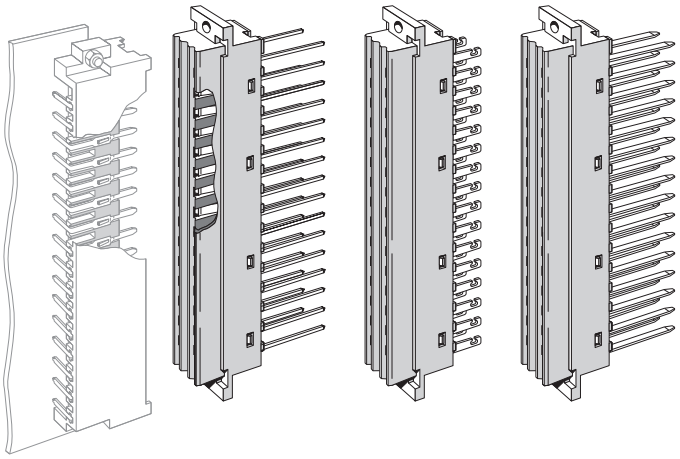


Fig. 6. Edge connectors with wire-wrap, soldering and Maxi Termipoint posts.

The 6-pin connector (Fig. 7) is used for heavy current inputs. When the module is withdrawn, the metal ball (2) is pressed by the spring (3) against the two sockets (1) to short-circuit the external current circuit. When the module is plugged in, the tongue (4) pushes the ball (2) away from the two sockets (1), thus permitting the impressed current of the external circuit to flow through the module. The mechanism is designed such that when withdrawing the module, the sockets are short-circuited before the pins and sockets separate. Similarly when inserting the module, the pins and sockets make before the short-circuit is opened. This ensures that at no time are the secondaries of current transformers open-circuited. The maximum thermal ratings of the shorting links are 12 A continuous, 65 A for 10 s and 200 A for 1 s. With the module inserted, i.e. in normal operation, the maximum ratings are determined by the ratings of the individual transducers.

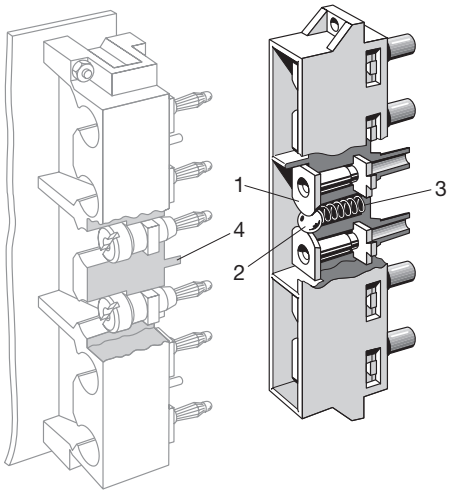


Fig. 7. 6-pin edge connector.

Coding

The plug-in modules are coded to prevent them being inserted in the wrong slot.

For this purpose they are fitted with a red coding strip mounted over the edge connector plug. The coding strip has 12 tongues which can be broken off in suitable combinations to provide an unique code for each module.

The tongues of the coding strip fit into corresponding gaps in a strip next to the connector socket in the rack into which pegs have been inserted to agree with the code of the coding strip on the plug.

Exception! 1 mm diameter metal pins are inserted in the connector socket in the case of racks with Souriau coding and holes are drilled at the corresponding locations on the edge connector plug on the module.

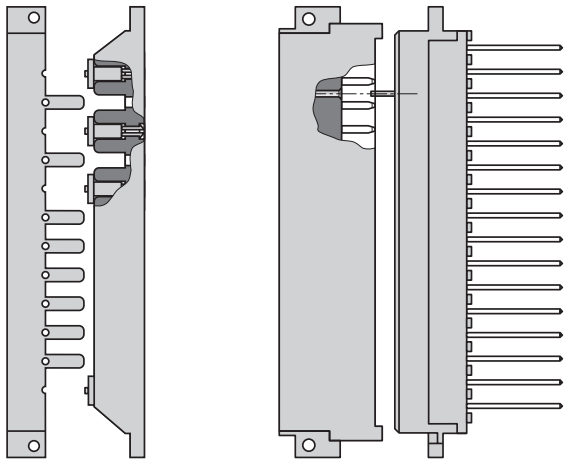


Fig. 8.
Left: Coding of modules by means of a coding housing, coding strip and coding inserts.
Right: Souriau coding by means of metal pins and holes drilled to match.

EURAX BT 901
19″ rack

Terminals and connectors

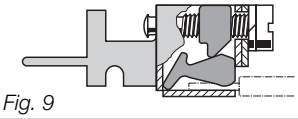
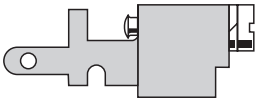
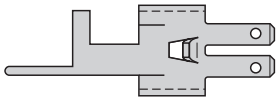
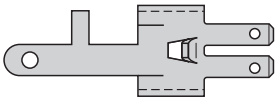
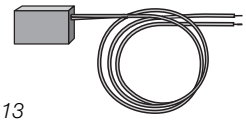
External inputs and outputs are connected either to screw terminals, plug-in/soldered terminals or multiple connectors.

The screw terminals (Figures 9 and 10) are equipped with wire-guard clamps suitable for 2 wires with gauges up to 2.5 mm^2. They are fitted in terminal blocks with a capacity of 171 terminals each.

Plug-in or soldered terminals can be supplied on request instead of the standard screw terminals (Figures 11 and 12).

When measuring temperature using thermocouples (excluding thermocouple Type B), an Ni 100 resistor (Fig. 13) is available for reference point correction.

Screw terminals and plug-in or soldered terminals

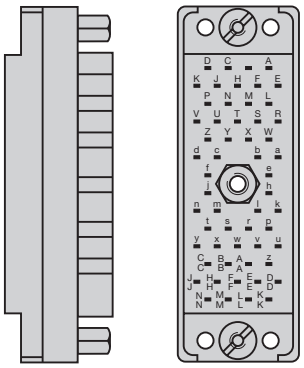
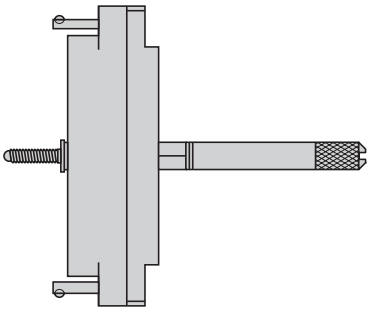
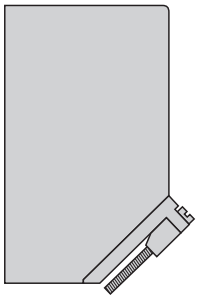
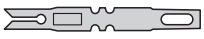
Versions	Designation	Order No.
 *Fig. 9*	Screw terminal with wire-wrap post	896 912
 *Fig. 10*	Screw terminal with soldering post	896 904
 *Fig. 11*	Plug-in terminal with wire-wrap post	977 655
 *Fig. 12*	Plug-in terminal with soldering post	977 647
 *Fig. 13*	Cold junction compensation R_{comp} (Ni 100)	987 232

The 56-pole multiple connector (Fig. 14) comprises a socket base (Fig. 15), a plug upper part (Fig. 16) and an aluminium housing (Fig. 17).

Fig. 14. Multiple connector.

The connector socket is fitted to the rear of the equipment below the upper terminal block and has either wire-wrap or soldering posts for internal connections. On request, up to 2 lots of 6 multiple connectors can be mounted providing the upper terminal block is also replaced by a plate.

56-pin multiple connector (Elco)

Versions	Designation	Order No.
 *Fig. 15. Rear.*	Socket (less contacts)	978 637
 *Fig. 16*	Plug (less contacts) with securing screw	978 661
 *Fig. 17*	Aluminium cover for plug	978 679
 *Fig. 18*	Contact for wire-wrap connection (used for socket and plug)	978 653
 *Fig. 19*	Contact for soldered connection (used for socket and plug)	978 645

Wiring (basic version)

The only wiring is between the edge connector sockets into which the modules are plugged and the rack terminals.

On the standard version, this wiring is made between wire-wrap pins on the back of the edge connector sockets and the screw terminals of the rack (Fig. 20). Special wire-wrap quality wire Tefzel AWG 22 is used.

The leads of multi-core plastic Soflex TQ 1.5 mm^2 cable between the sockets of the 6-pin heavy current connectors and the screw terminals are crimped onto pins of the edge connector sockets and soldered to the pins of the screw terminals (Fig. 21).

Other methods of connection are given in the Section "Wiring (special versions)".

Rack edge connectors:	Rack terminals and multiple connectors:

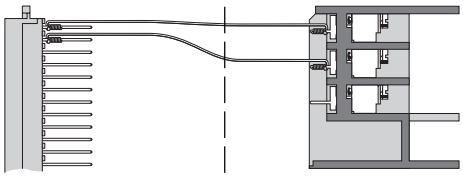



Fig. 20. ***Wire wrap*** *termination.*	***Wire-wrap*** *termination on* ***screw*** *terminals.*

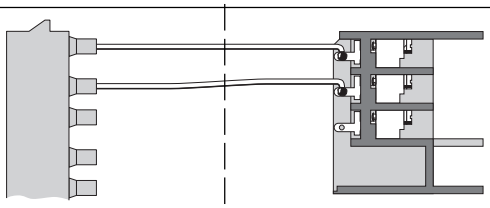



Fig. 21. Crimped heavy current termination.	***Soldered*** *termination on* ***screw*** *terminals.*

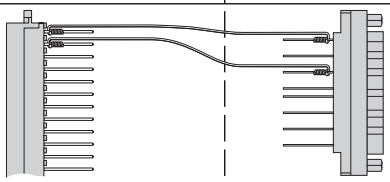



Fig. 22. ***Wire-wrap*** *termination.*	***Wire-wrap*** *termination on 56-pin multiple connector.*

Wiring (special versions)

Rack edge connectors:	Rack terminals and multiple connectors:

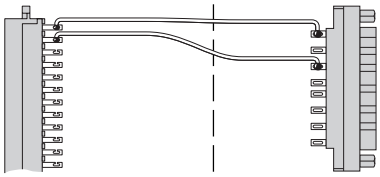



Fig. 23. ***Soldered*** *termination.*	***Soldered*** *termination on 56-pin multiple connector.*

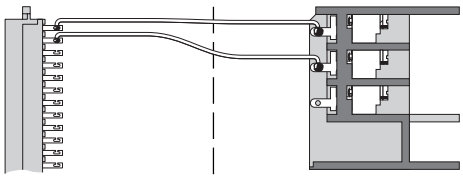



Fig. 24. ***Soldered*** *termination.*	***Soldered*** *termination on* ***screw*** *terminals.*

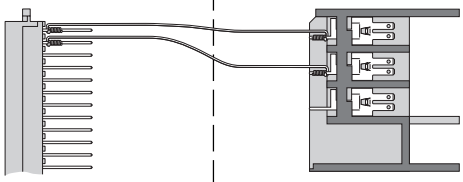



Fig. 25. ***Wire-wrap*** *termination.*	***Wire-wrap*** *termination on* ***plug-in*** *rack connector.*

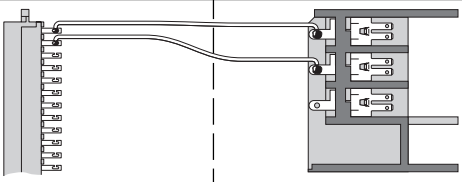



Fig. 26. ***Soldered*** *termination.*	***Soldered*** *termination on* ***plug-in*** *rack connector.*

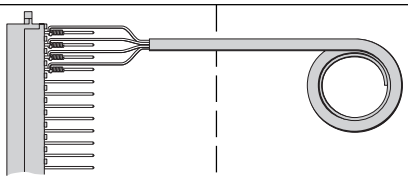



Fig. 27. ***Wire-wrap*** *termination.*	*Direct connection of* ***cables*** *to edge connector.*

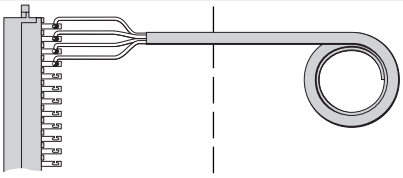



Fig. 28. ***Soldered*** *termination.*	*Direct connection of* ***cables*** *to edge connector.*

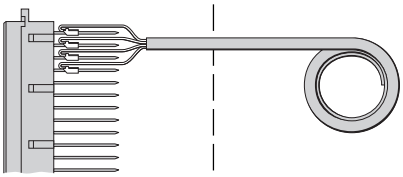



Fig. 29. ***Maxi Termipoint*** *termination.*	*Direct connection of* ***cables*** *to edge connector.*

Amount of wiring

The amount of the wiring depends on …

… the **number of plug-in modules** in the rack.

… the **types of modules** fitted according to the Section "Overview of EURAX plug-in modules".

… the **method of wiring the module inputs** as described on Page 6.

EURAX BT 901
19″ rack

Method of wiring module inputs

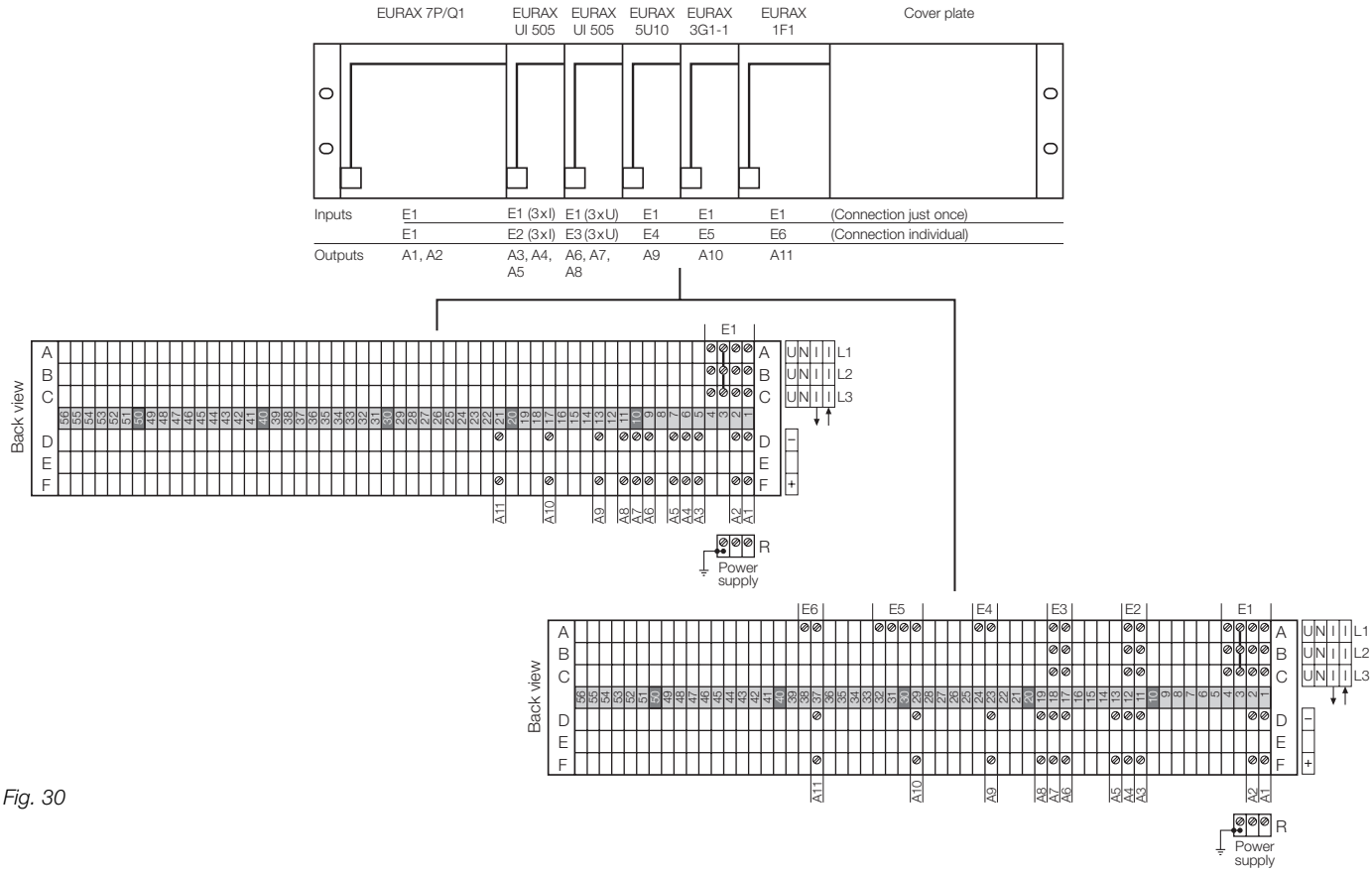


Fig. 30

Depending on the application, signals connected to the rack that are used by several modules (e.g. the same measured variables of a three-phase system evaluated in different ways) can be run …

… **just once** (upper back view in Fig. 30) and looped internally to the respective plug-in modules

or

… **individually** to separate rack terminals for each module (lower back view in Fig. 30).

Running the external cables **just once** wherever possible minimises the cost of cabling in the plant.

Individual cables, on the other hand, have the advantage of increased reliability, because not all the modules are dependent on a single link.

Explosion protection data

Order Code	Type of protection “Intrinsic safety” Marking 19″ rack EURAX BT 901	Certificates CENELEC Certificate of conformity PTB No.	Mounting location of the rack
901-3/4/5	[EEx ia] IIC	Ex-91.C.2075 X	Outside the hazardous area

Order Code

Table 1: 19″ rack for basic Ex and non-Ex versions

DESCRIPTION	ID			
1. Basic versions				
Standard non-Ex version With **2 grey terminal blocks top** and **bottom,** for max. 2 × 171 **screw** terminals	901-1			
Non-Ex version With **1 grey terminal block at top** for max. 171 **screw** terminals and **1 metal cover** (**bottom rear**) for mounting **max. six 56-pin multiple connectors**		901-2		
Preferred Ex version [EEx ia] IIC CENELEC With **1 blue terminal block at top** for connecting intrinsically safe circuits and **1 grey terminal block at bottom** for non-intrinsically safe circuits, for max. 2 × 171 **screw** terminals			901-3	
Ex version [EEx ia] IIC CENELEC With **1 blue terminal block at top** for max. 171 **screw** terminals for connecting intrinsically safe circuits and **1 metal cover (bottom rear)** for mounting **max. six 56-pin multiple connectors** for non-intrinsically safe circuits				901-4
2. Internal wiring (standard) (between the module edge connectors and the rack terminals)				
Wire-wrap pins on the back of the edge connectors and the screw terminals on the rack and crimp connections on the back of the heavy current connectors and soldered connections on the back of the corresponding screw terminals on the rack (Figures 20 and 21) **(version with 2 terminal blocks)**	1	–	1	–
Wire-wrap pins on the back of the edge connectors or socket bases of multiple connectors and the screw terminals on the rack and crimp connections on the back of the heavy current connectors and soldered connections on the back of the corresponding screw terminals on the rack (Figures 20 and 22) **(version with 1 terminal block and 1 metal cover with multiple connector)**	–	1	–	1
See price sheets BT 901 W1 Pe and BT 901 W2 Pe for wiring prices				
3. Power supply connection				
No power supply connection (e.g. plug-in modules that do not require a power supply or derive it from the measured variable)	0	0	0	0
Power supply internally looped between all plug-in modules	1	1	1	1
Power supply run to separate terminals for each plug-in module	2	2	2	2
4. Accessories				
None	0	0	–	–
1 metal cover 84T-160 top **or** bottom (top standard)	1	1	–	–
2 metal covers 84T-160 top **and** bottom (mandatory for Ex versions)	2	2	2	2
5. Layout				
Enclose a filled in layout and wiring diagram (Form W 2312) with your order (see examples on page 12).				

EURAX BT 901
19″ rack

Table 2: 19″ rack for special non-Ex versions

DESCRIPTION	ID							
1. Special non-Ex versions wiring according to customer's specification								
With **2 metal covers** (**top** and **bottom** rear), for **max. twelve 56-pin multiple connectors**	901-A							
With **2 grey terminal blocks top** and **bottom,**								
for max. 2 × 171 **screw** terminals		901-B						
for max. 2 × 171 **plug-in** connections			901-C					
With **1 grey terminal block top rear,**								
for max. 171 **screw** terminals				901-D				
for max. 171 **plug-in** connections					901-E			
and **1 metal cover** (**bottom** rear) for **max. six 56-pin multiple connectors**								
For direct connection of **cables**								
to edge connectors with **wire-wrap** posts						901-F		
to edge connectors with **soldering** posts							901-G	
to edge connectors with **Maxi Termipoint** posts								901-H
no internal wiring								
2. Internal wiring (between the module edge connectors and the rack terminals)								
None	–	–	–	–	–	0	0	0
Wire-wrap	1	–*	1	–*	1	–	–	–
Soldering	2	2	2	2	2	–	–	–
See price sheets BT 901 W1 Pe and BT 901 W2 Pe for wiring prices								
3. Power supply connection								
No power supply connection (e.g. plug-in modules that do not require a power supply or derive it from the measured variable)	0	0	0	0	0	0	0	0
Power supply internally looped between all plug-in modules	1	1	1	1	1	1	1	1
Power supply run to separate terminals for each plug-in module	2	2	2	2	2	2	2	2
4. Accessories								
None	0	0	0	0	0	0	0	0
1 metal cover 84T-160 top **or** bottom (top standard)	1	1	1	1	1	1	1	1
2 metal covers 84T-160 top **and** bottom (IP 20)	2	2	2	2	2	2	2	2
5. Layout								
Enclose a filled in layout and wiring diagram (Form W 2312) with your order (see examples on page 12).								

* Use basic version 901-1 or 901-2.

Table 3: 19″ rack for special Ex version

DESCRIPTION	ID
1. Special Ex version [EEx ia] IIC CENELEC Without terminal block for direct connection of cables to **wire-wrap, soldering** or **Maxi Termipoint** posts (state desired method)	901-5
2. Internal wiring None	0
3. Power supply connection No power supply connection (e.g. plug-in modules that do not require a power supply)	0
Power supply internally looped to all plug-in modules (edge connectors)	1
4. Accessories 2 metal covers 84T-160 top **and** bottom	2
5. Layout Enclose a filled in layout and wiring diagram (Form W 2312) with your order (see examples on page 12).	

Loose parts

Description	Order No.
Cover plates (RAL 7032) for any unused or spare slots	
for 1 TE	834 342
for 3 TE	841 404
for 4 TE	822 032
for 7 TE	822 040
for 11 TE	870 495
for 14 TE	870 502
for 17 TE	841 412
for 20 TE	822 058
for 21 TE	870 510
for 28 TE	870 528
special width up to 84 TE	specify
The following small parts must also be ordered for cover plates to be fitted on existing 19″ racks, 2 captive screws each for TE 1 to 9 or 4 captive screws each for TE ≥ 10:	
Screw M 2.5 × 10	831 223
Captive washer M 2.5	831 215

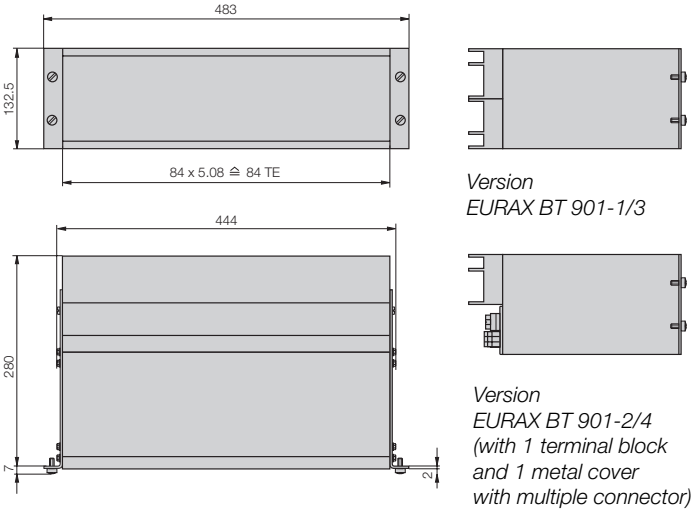
Description	Order No.
LV edge connector plug and socket DIN-F, loose for mounting in 19″ rack	
Set (plug and socket) less contacts for contacts with wire-wrap posts	994 625
Set (plug and socket) less contacts for contacts with soldering posts	107 567
Set (plug and socket) less contacts for contacts with Maxi Termipoints posts	107 715
Contact with wire-wrap post for rows z and d	981 416
Contact with wire-wrap post for row b	981 408
Contact with soldering post for rows z and d	997 413
Contact with soldering post for row b	997 405
Contact with Maxi Termipoint post for rows d and z	982 084
Contact with Maxi Termipoint post for row b	982 076
Maxi Termipoint clip	982 109
Assembly surcharge per contact	

EURAX BT 901
19″ rack

Description	Order No.
LV edge connector plug DIN-F for EURAX plug-in modules	
Edge connector plug DIN-F loose, less blade contacts	837 007
Blade contact for row d	837 015
Blade contact for row b	961 377
Blade contact for row z	837 023
Heavy current edge connector socket, loose for mounting in 19″ rack	
Socket less contacts	850 083
Pair of sockets with 0.5 m cable	994 617
Pair of sockets with 2 m cable	107 690
Pair of sockets with 6 m cable	107 707
Heavy current edge connector plug, loose for mounting on EURAX plug-in modules	
Plug less contacts	828 410
Pair of brush pins	828 428
Connector coding strips	
Coding strip for fitting on 19″ rack	828 361
Peg for rack coding strip	828 379
Coding strip for edge connector DIN-F on EURAX plug-in modules	847 808
Coding pin for Souriau coding	981 424
Accessories	
Guide rail	828 329
Cold junction compensation R_{comp} (Ni 100)	987 232
Captive screws M6 for 19″ rack	837 619
Captive washer M6 for 19″ rack	837 627
EURAX service PCB complete	849 903
Cable clamp for connector socket TC 823	978 885
Cover plate 84T-160 (IP 20 and NEx)	843 559

Description	Order No.
Test cable	
Cable 1 m with two 2 mm Ø plugs, red	826 779
Cable 1 m with two 2 mm Ø plugs, black	826 787
Cable 1 m with two 2 mm Ø plugs, blue	826 795
56-pin multiple connector, loose	
Socket with securing nut	978 637
Plug with securing screw	978 661
Aluminium cover for plug	978 679
Contact with soldering post	978 653
Contact with wire-wrap post	978 645
Same contacts for plug or socket, loose	
Aluminium mounting plate for multiple connectors	
Half-height for 6 multiple connectors	977 332
Full-height for 5 multiple connectors and cut-out for 3 power supply terminals	977 845
Power supply terminals	803 181
Cover plate type B/DFK	981 151
1 or 2 half-height plates or 1 full-height plate can be fitted to one 19″ rack	
Terminal blocks and terminals	
Terminal block less terminals, grey	897 001
Terminal block less terminals, blue (Ex)	956 435
Screw terminal with wire-wrap post	896 912
Screw terminal with soldering post	896 904
Plug-in terminal with wire-wrap post	977 655
Plug-in terminal with soldering post	977 647
Insulated crimp sleeve (red) 6.3 × 0.8	853 285
Insulated crimp sleeve (red) 2.8 × 0.8	715 881

Dimensioned drawing



Version EURAX BT 901-1/3

Version EURAX BT 901-2/4 (with 1 terminal block and 1 metal cover with multiple connector)

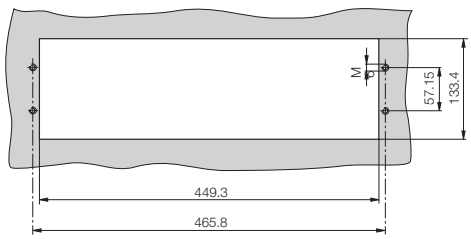


Fig. 31. EURAX BT 901-1/2/3/4. The depth of the other versions can vary.

Overview of the EURAX plug-in modules and frontplate widths (standard units)

Plug-in modules for AC measured variables

Measured variable	Module designation	Frontplate width 1 TE = 5.08 mm	Remarks
Current	EURAX UI 505	7 TE	No power supply required, one, two or three-pole for current and voltage
	EURAX 1I/I1	11 TE	One, two or three-pole for current and voltage
	EURAX I 210	7 TE (AC) 11 TE (DC)	r.m.s. AC current
Voltage	EURAX UI 505	7 TE	No power supply required, one, two or three-pole for current and voltage
	EURAX 1U/U1	11 TE	One, two or three-pole for current and voltage
	EURAX 5U10	7 TE	No power supply required, suppressed initial range
	EURAX 7U9	17 TE	Voltage difference (e.g. for synchronisation)
	EURAX U 210	7 TE (AC) 11 TE (DC)	r.m.s. AC voltage
Power	EURAX 1P1	11 TE	Active power
	EURAX 1Q1	11 TE	Reactive power
	EURAX 7P/Q1	20 TE	Combined active and reactive power
Frequency	EURAX 1F1	11 TE	Digital measurement of period duration (time base: quartz 4.4 MHz)
	EURAX 3F10	22 TE	Frequency difference (e.g. for synchronisation)
Phase-angle	EURAX 3G1	7 TE (AC) 11 TE (DC)	Phase-angle or phase-angle difference (e.g. for synchronisation)

Plug-in modules utilisation

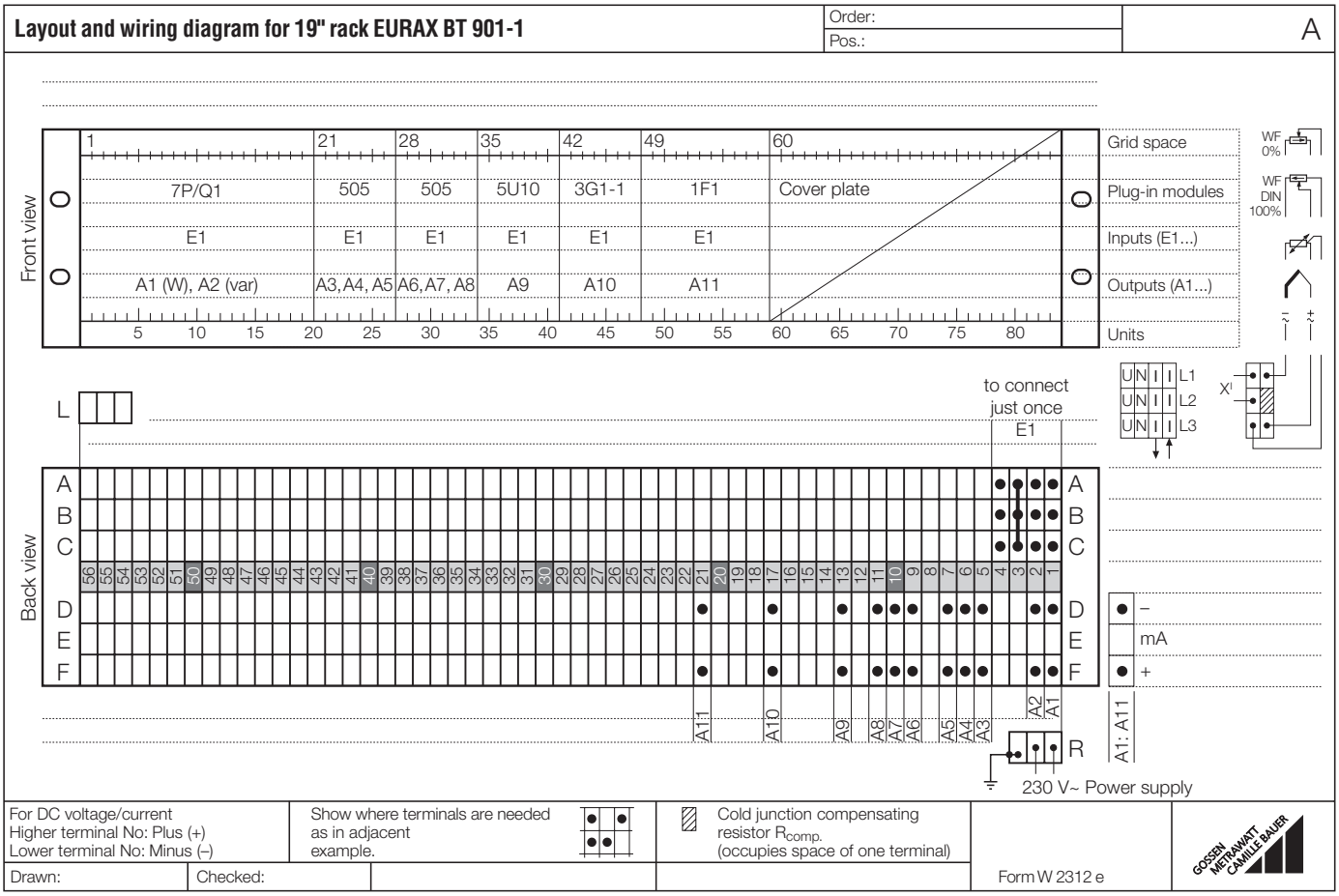
Measured variable/Function	Module designation	Front-plate width 1 TE = 5.08 mm	Remarks
Temperature, resistance, DC signals	EURAX VC 603	4	Programmable transmitter/limit monitor Ex and non-Ex versions
	EURAX V 604		Programmable transmitter Ex and non-Ex versions
Analogue/digital converter	EURAX 1Z1	7	Application: Data transmission
Digital/analogue converter	EURAX 3Z1	11	
Analogue/digital converter (for measuring quantity)	EURAX 1S6	7 7 14	Without counter With 1 counter With 2 counters
Power supply unit with supplementary functions	EURAX B 811	4	Also transmission of FSK, Ex and non-Ex versions
Power supply unit with supplementary functions	EURAX B 801	4	Also available as isolating amplifier without power supply function, Ex and non-Ex versions
Power supply unit with input circuit monitor	EURAX BC 802	7	With two outputs contact, with LED on request Ex and non-Ex versions
Passive 3-channel DC isolator	EURAX SI 815	4	Transfers power supply, but not connected to it. Also transmission of FSK Ex and non-Ex versions
Passive 4-channel DC isolator	EURAX TI 807	4	No power supply required Ex and non-Ex versions
Passive DC isolator with up to 8 channels	EURAX TI 816	4	No power supply required

(AC) AC power supply
(DC) DC power supply

A range of cover plates (RAL 7032) with widths 1, 3, 4, 7, 11, 14, 17, 20, 21 and 28 standard units is available for covering unused slots.

EURAX BT 901
19″ rack

Example: Ascertainment to layout for Fig. 30, upper back view



Problem: Measurement of following measured variables in a 4-wire 3-phase network unbalanced load

Measured variables	Single-phase measurem. L1	L2	L3	Three-phase measurem.
Active power				P
Reactive power				Q
Currents	I_{L1}	I_{L2}	I_{L3}	
Phase voltages 0...120%	U_{L1}–N	U_{L2}–N	U_{L3}–N	
Phase voltages 80…120%	U_{L1}–N			
Phase angle cosφ	U_{L1}–N I_{L1}			
Frequency F	U_{L1}–N			

Solution: With 6 EURAX plug-in modules

Designation	Function	Front plate width
7P/Q1	W/var	20 TE
UI 505	3 × I	7 TE
UI 505	3 × U	7 TE
5U10	1 × U	7 TE
3G1-1	1 × cosφ	7 TE
1F1	1 × Hz	11 TE
Space requirements		59 TE

Printed in Switzerland • Subject to change without notice • Edition 11.99 • Data sheet No. BT 901 Le

Camille Bauer Ltd
Aargauerstrasse 7
CH-5610 Wohlen/Switzerland
Phone +41 56 618 21 11
Fax +41 56 618 24 58
Telex 827 901 cbm ch