

# New Functions and Integrated Communication Capability

The new SENTRON 3VL ETUs

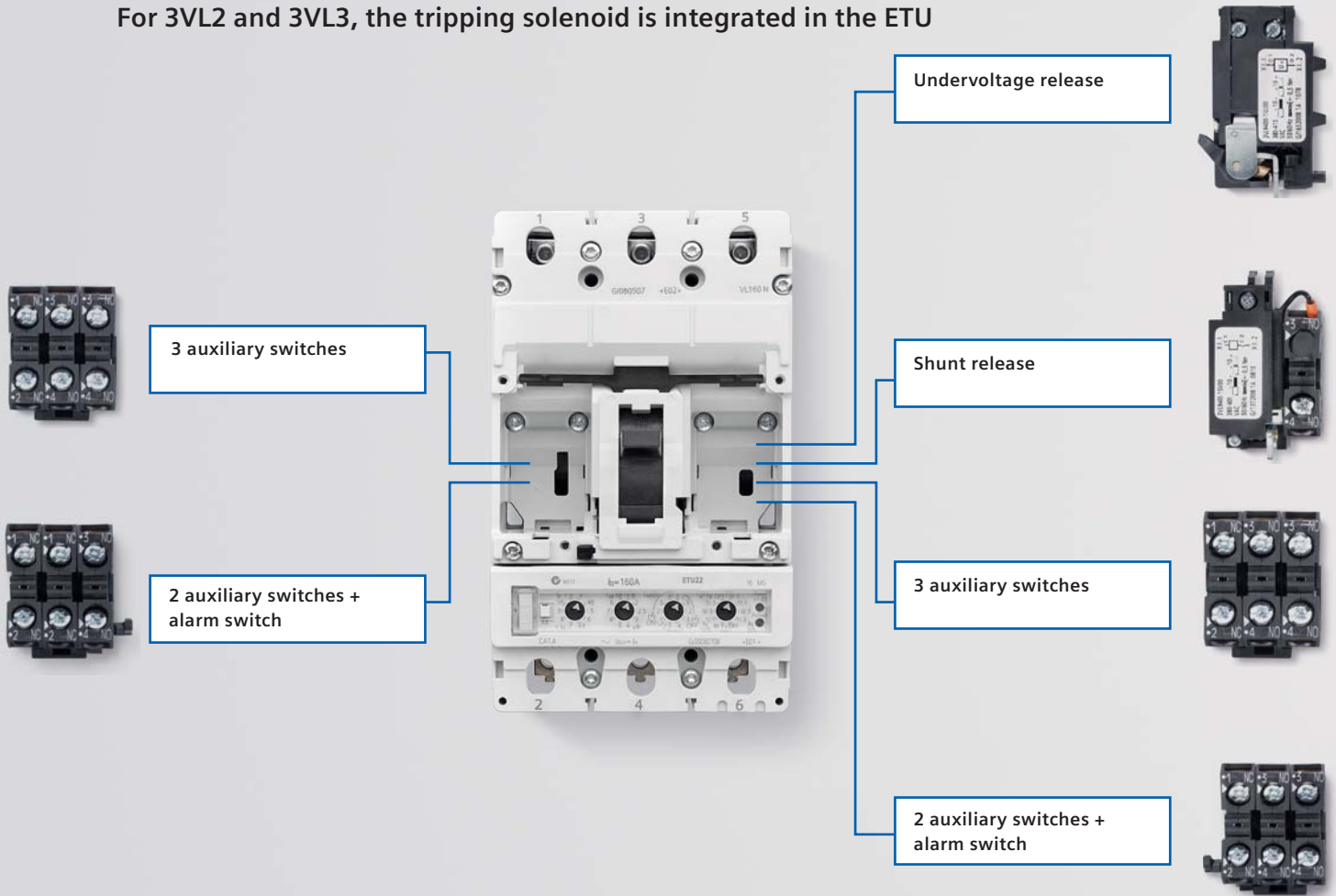


## SETRON 3VL

Answers for industry.



For 3VL2 and 3VL3, the tripping solenoid is integrated in the ETU



Maximum diversity for customized application:

## The Intelligent Molded-Case Circuit Breakers SENTRON 3VL ETUs

No compromises should be accepted when it comes to your electrical distribution systems' reliability and efficiency. Therefore, opt for our new SENTRON 3VL ETUs! Thanks to an electronic overcurrent trip unit (ETU), these molded-case circuit breakers not only offer overload and short-circuit protection, but feature many further functions as well as integrated communication capability.



**NEW**

- Neutral conductor protection adjustable to 50 % / 100 %
- Adjustable ground-fault protection

| ETU   | Protection | 3-pole |          |          |           | 4-pole with neutral conductor protection |       |          |          |               |
|-------|------------|--------|----------|----------|-----------|--|-------|----------|----------|---------------|
|       |            | RS 1   | RS 2     | RS 3     | RS 4      | Protection                               | RS 1  | RS 2     | RS 3     | RS 4          |
| ETU10 | LI         | $I_R$  | $t_R$    | $I_I$    |           | LIN                                      | $I_R$ | $t_R$    | $I_I$    | $I_N$         |
| ETU12 | LIG        | $I_R$  | $t_R$    | $I_I$    | $I_g/t_g$ | LIGN                                     | $I_R$ | $t_g$    | $I_I$    | $I_g/t_g/I_N$ |
| ETU20 | LSI        | $I_R$  | $I_{Sd}$ | $t_{Sd}$ |           | LSIN                                     | $I_R$ | $I_{Sd}$ | $t_{Sd}$ | $I_N$         |
| ETU22 | LSIG       | $I_R$  | $I_{Sd}$ | $t_{Sd}$ | $I_g/t_g$ | LSIGN                                    | $I_R$ | $I_{Sd}$ | $t_{Sd}$ | $I_g/t_g/I_N$ |

RS = rotary switch

Featuring up to 4 rotary coding switches, the SENTRON 3VL ETUs offer extended setting options such as adjustable ground-fault and neutral conductor protection. In addition, they provide more space for auxiliary and alarm switches as the Maglatch tripping solenoid is now directly integrated in the ETU for all sizes. Thanks to the integration of the new COM20 and COM21 modules, all ETU versions can consistently communicate via PROFIBUS/MODBUS. Of course, all these options can be assembled in accordance with your individual requirements and needs thanks to the devices' modular design and comprehensive accessories.

**The most important advantages of the new SENTRON 3VL ETUs at a glance:**

- Tripping solenoid directly integrated in the ETU with 3VL2 and 3VL3
- Neutral conductor protection adjustable to 50 % / 100 %
- Integrated communication capability of all ETU versions
- New COM20/21 modules for connection to PROFIBUS/MODBUS
- Adjustable ground-fault protection
- New ETU versions with demand-compliant equipment

## Unlimited communication with the innovative COM20 and COM21 modules

A transparent power distribution concept represents the paramount prerequisite for efficient and reliable system operation. The new COM20/21 modules perfectly meet this requirement. Thanks to the modules' integration, all ETU versions are able to consistently communicate via PROFIBUS/MODBUS.

Whether switch state, tripping cause, warning messages, current measuring, event log, switching cycles or device control: The cost- and function-optimized COM20/21 modules reliably transmit all important information to ensure the maximum transparency of your system's state at all times.

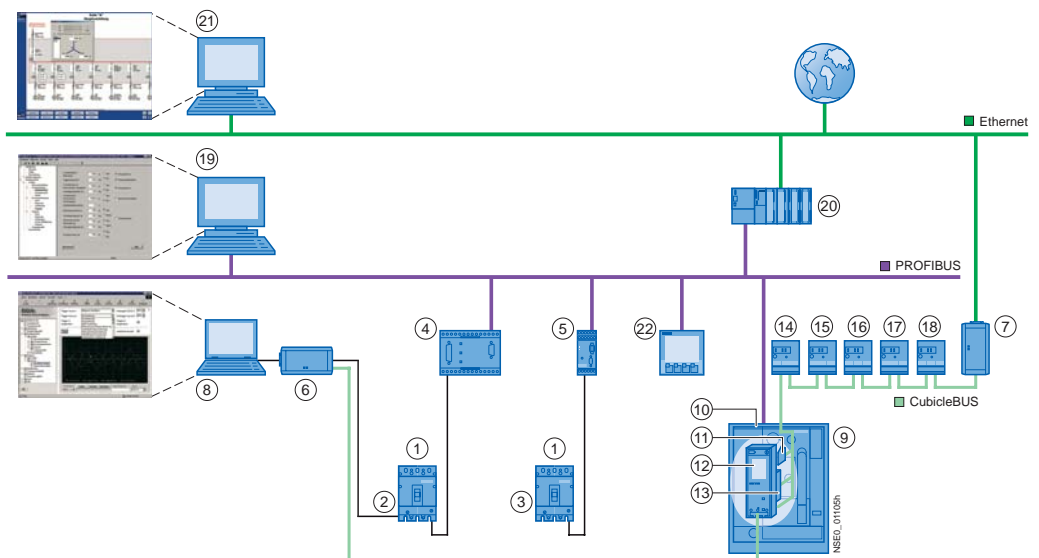
### Further advantages of the new COM20/21 solution:

- Improved efficiency through cost savings of more than 50% compared to the COM10 solution
- Universal applicability – integrated communication is even supported by the most cost-favorable ETU
- Easier installation through optimized ETU connection
- Maximum flexibility through smaller design for optimized control cabinet space
- Particularly uncomplicated through elimination of auxiliary and alarm switch wiring to the communication module



## Improved system availability through cross-range communication

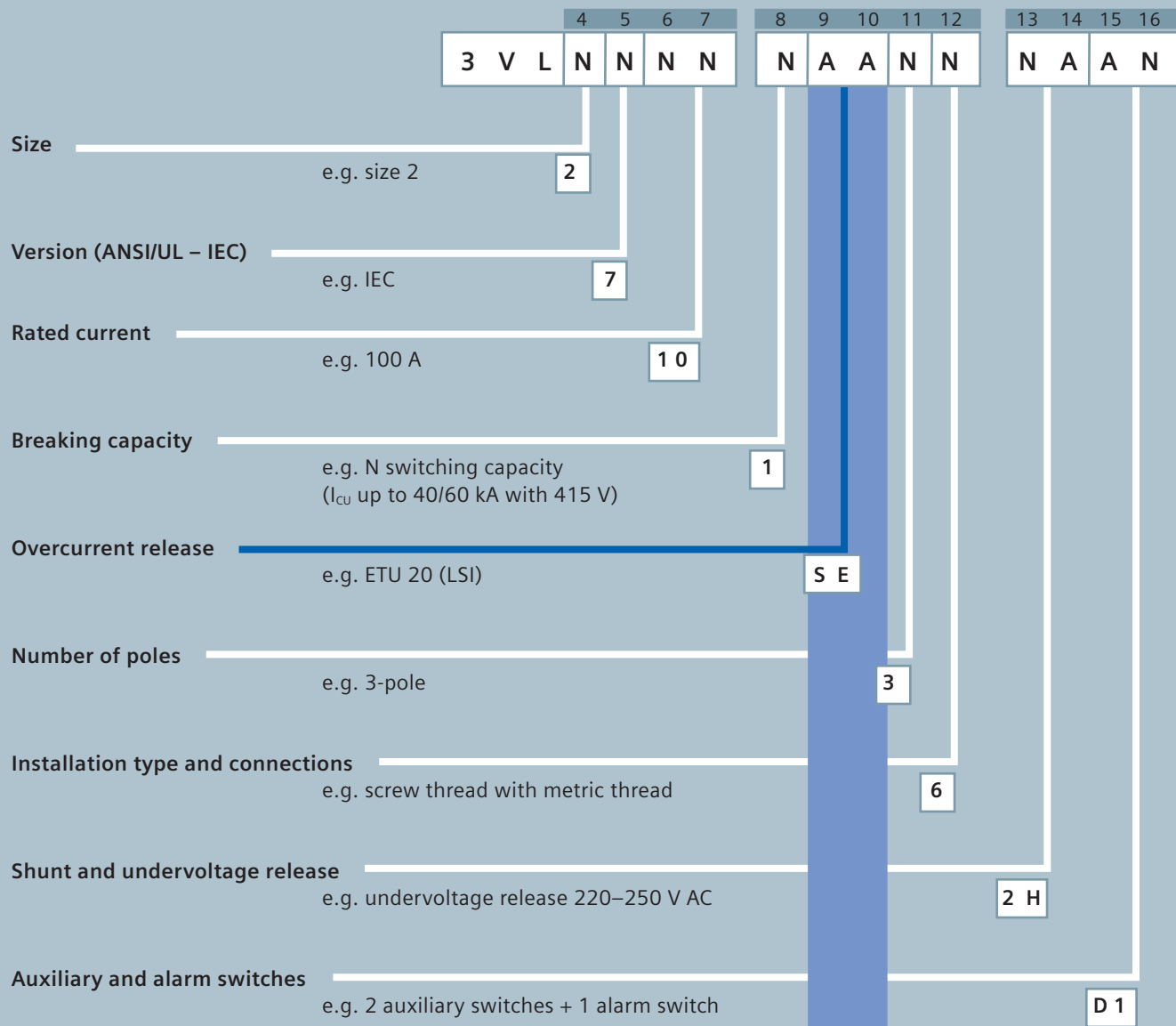
- ① SENTRON 3VL
- ② Electronic trip unit LCD ETU
- ③ Electronic trip unit ETU
- ④ COM10 PROFIBUS module, including ZSI
- ⑤ COM20 PROFIBUS module<sup>2)</sup>, including ZSI
- ⑥ Breaker data adapter (BDA)
- ⑦ BDA Plus with Ethernet interface
- ⑧ Browser-capable input and output device (e.g. notebook)
- ⑨ SENTRON 3WL
- ⑩ COM15 PROFIBUS module<sup>1)</sup>
- ⑪ Breaker status sensor (BSS)
- ⑫ Electronic trip unit ETU
- ⑬ Measuring function Plus
- ⑭ ZSI module
- ⑮ Digital output module with relay contacts
- ⑯ Digital output module with relay contacts, configurable
- ⑰ Analog output module
- ⑱ Digital input module
- ⑲ Switch ES Power on PC
- ⑳ PLC, e.g. SIMATIC S7
- ㉑ SIMATIC WinCC/PCS7 powerrate
- ㉒ SENTRON PAC



<sup>1)</sup> The COM16 module is required for MODBUS connection

<sup>2)</sup> The COM21 module is required for MODBUS connection

# New Order Number Overview for Electronic Trip Units (ETUs)



| NEW |   |                                     |
|-----|---|-------------------------------------|
| S   | X | X = ETU type (ETU10, 12, 20 and 22) |
| T   | X |                                     |
| M   | X |                                     |
| N   | X |                                     |

S = ETU 3-pole  
 T = ETU 4-pole  
 M = ETU 3-pole, communication-capable  
 N = ETU 4-pole, communication-capable

## Further information on our portfolio on the Internet:

Infocenter: [www.siemens.com/lowvoltage/catalogs](http://www.siemens.com/lowvoltage/catalogs)

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For further information, please contact your local Siemens sales partner.

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