SIEMENS

# Industrial Electrical Product Catalog

## อุปกรณ์ไฟฟ้าแรงดันต่ำซีเมนส์ สำหรับอุตสาหกรรม

Thailand 2026 Edition



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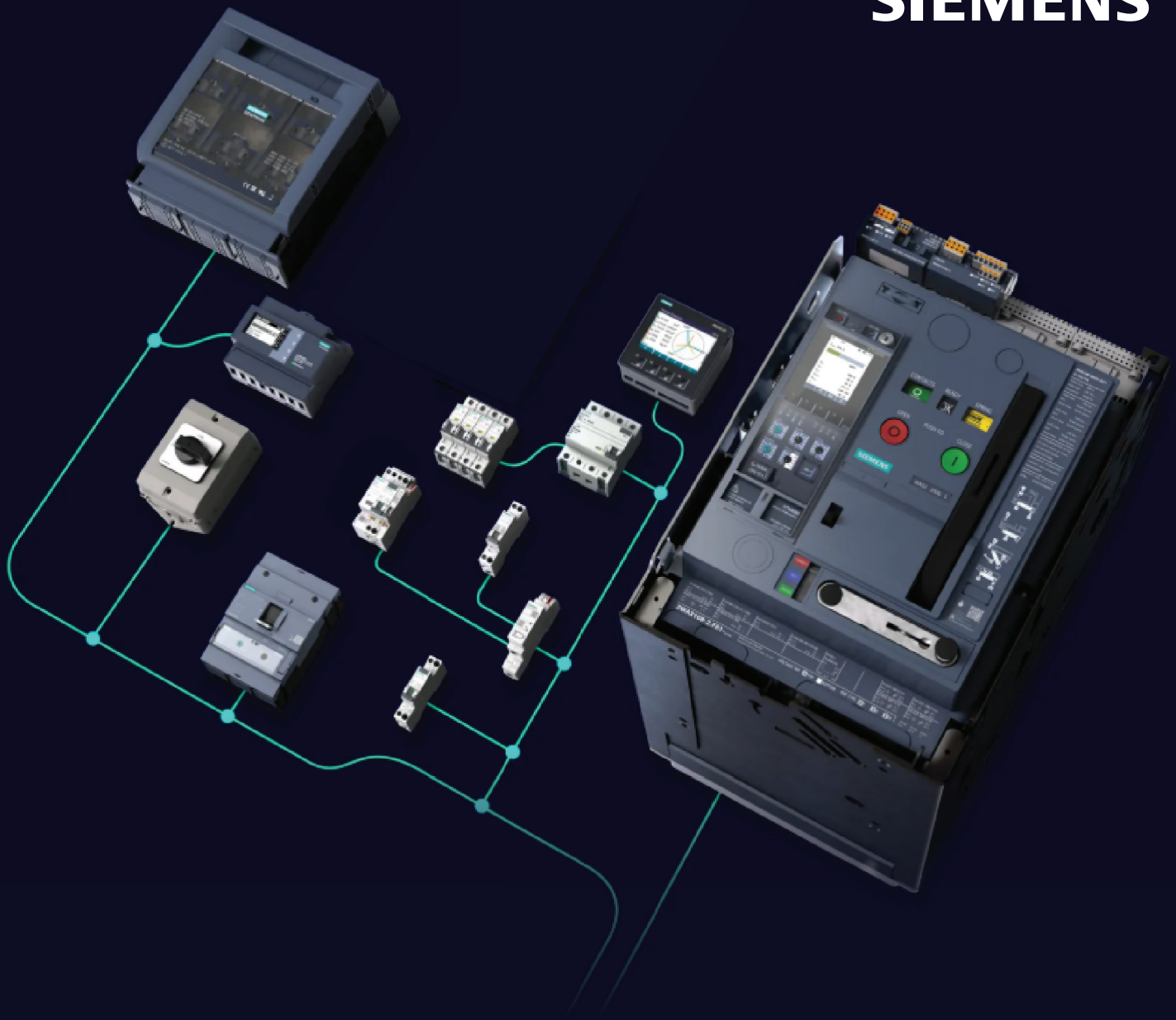
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ALPHA UNIVERSAL Distribution Board

SIEMENS



# SENTRON
## Protection and Monitoring Solution

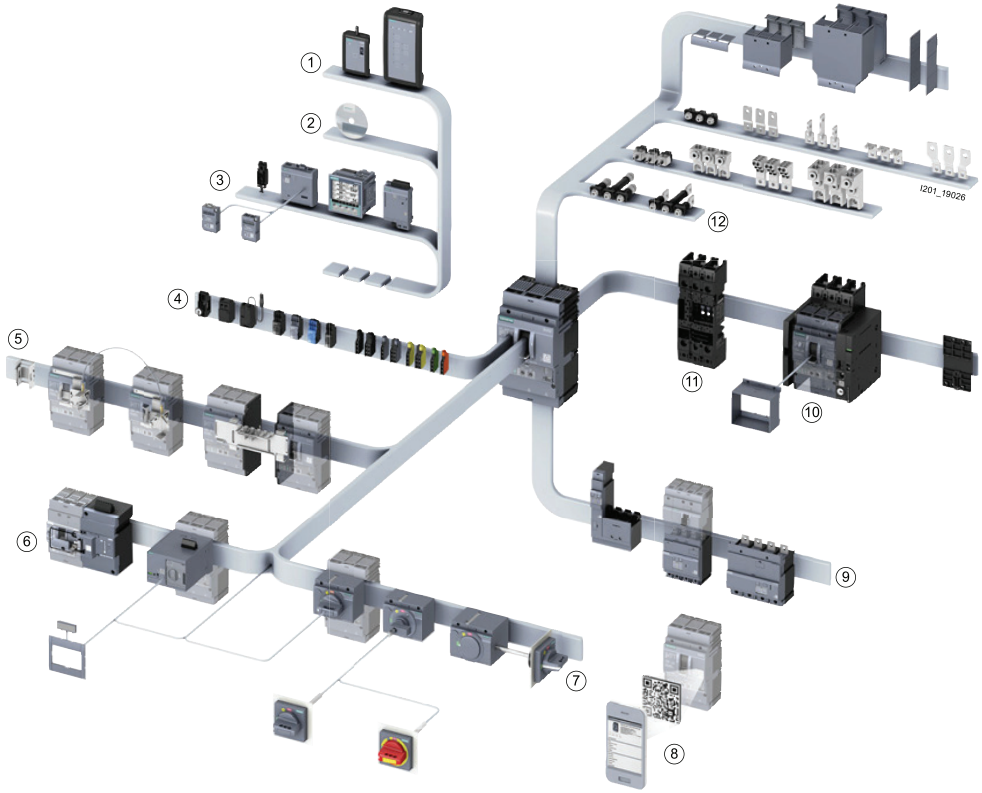
# 3VA Molded Case Circuit Breakers

## Product Overview

เซอร์กิตเบรกเกอร์รุ่น 3VA มาพร้อมกับชุดอุปกรณ์เสริม ที่สามารถติดตั้งเพิ่มเติมได้ทั้งภายในและภายนอกของตัวเซอร์กิตเบรกเกอร์ โดยสามารถเลือกใช้ได้ตามความต้องการกับเซอร์กิตเบรกเกอร์ทุกขนาด (ขึ้นอยู่กับประเภทของอุปกรณ์เสริม) ตารางด้านล่างแสดงข้อมูลของเซอร์กิตเบรกเกอร์ในแต่ละกระแสใช้งาน (A) ที่สามารถติดตั้งเข้ากับอุปกรณ์เสริมเพื่อเพิ่มฟังก์ชันการใช้งานได้



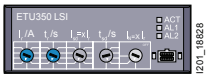
| Accessories | 3VA molded case circuit breakers up to 630 A | | | | | | | | | | 3VA up to 1000 A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3VA1 | | | | | 3VA2 | | | | | |
| | 100 | 160 | 250 | 400 | 630 | 100 | 160 | 250 | 400 | 630 | 1000 |
| Auxiliary switches and alarm switches | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Auxiliary releases | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Connection technology | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Plug-in technology | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Draw-out technology | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Front mounted rotary operator | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Door mounted rotary operator | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Side wall mounted rotary operatos | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Motor operator MO310 (mounted on the side) | | ■ | | | | | | | | | |
| Motor operator MO320 (mounted on the front) | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Motor operator with stored energy operator SEO520 | | | | | | ■ | ■ | ■ | | | |
| Locking, blocking and interlocking | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Residual current device (mounted on the side) | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Residual current device (mounted underneath) | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Communications Interface | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| EFB300 | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| TD300 and TD500 | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Cover frame | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| DIN rail adapter | ■ | ■ | | | | | | | | | |
| Busbar adapter | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |




1 Test devices
2 powerconfig software
3 Communication
4 Internal accessories
5 Accessories for locking, blocking and interlocking
6 Motor operators
7 Manual operators
8 Knowledge Manager
9 Residual current devices
10 Draw-out technology
11 Plug-in technology
12 Connection technology

# 3VA Trip Units

## Protection system for 3VA molded case circuit breakers up to 1000 A

| Trip units | Thermal-magnetic | Electronic | Electronic with display | Electronic with display and metering function |
|---|---|---|---|---|
| |  TM 2-series |  ETU 3-series |  ETU 5-series |  ETU 8-series |
| **Protective function** | | | | |
| Line protection | TM210, TM220, TM240 | ETU320, ETU330, ETU340, ETU350 | ETU550, ETU560 | ETU850, ETU860 |
| Starter protection | TM120M | ETU310M | - | - |
| Motor protection | - | ETU350M | ETU550M | ETU860M |
| **Integrated functions** | | | | |
| Parameterizing | Setting and reading the parameters<br>• Current values | Setting and reading the parameters<br>• Current values<br>• Delay times | Setting and reading the parameters<br>• Via display and communication<br>• Fine setting of the parameters<br>• Reading the measured values | Setting and reading the parameters<br>• Via display and communication<br>• Fine setting of the parameters<br>• Reading the measured values |
| Status display | - | Indicating the ETU status via LEDs | Indicating the ETU status via LEDs | Indicating the ETU status via LEDs |
| Interface | - | Interface for test devices | Interface for test devices | Interface for test devices |
| Metering function | - | - | - | Metering function integrated |

## Protective functions of the 3VA2 with electronic trip unit

| | ETU310M I | ETU320 LI | ETU330 LIG | ETU340 ELISA® | ETU350 LSI | ETU350M LSI | ETU550 LSI | ETU550M LSI | ETU560 LSIG | ETU850 LSI | ETU860 LSIG | ETU860MT LSIG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Protection** | | | | | | | | | | | | |
| Starter protection | ■ | - | - | - | - | - | - | - | - | - | - | - |
| Motor protection | - | - | - | - | ■ | - | - | ■ | - | - | - | ■ |
| Line protection | - | ■ | ■ | ■ | ■ | - | ■ | ■ | ■ | ■ | ■ | - |
| Generator protection | - | ■ | ■ | - | ■ | - | ■ | - | ■ | ■ | ■ | - |
| **Version available with** | | | | | | | | | | | | |
| 3-pole without external neutral conductor transformer | ■ | ■ | ■ | ■ | ■ | ■ | - | ■ | - | - | - | ■ |
| 3-pole without external neutral conductor transformer | - | - | - | - | - | - | ■ | - | ■ | ■ | ■ | - |
| 4-pole without external neutral conductor transformer | - | ■ | ■ | ■ | ■ | - | ■ | - | ■ | ■ | ■ | - |
| **Available protection parameters** | | | | | | | | | | | | |
| Characteristic in L range | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ | $I^2t$ |
| $I_r$ | - | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| $t_r$ at $6 \times I_r$ | - | ■ | ■ | - | ■ | - | ■ | - | ■ | ■ | ■ | - |
| $t_c$ | - | - | - | - | - | ■ | - | ■ | - | - | - | ■ |
| $t_p$ | - | - | - | - | - | - | ■ | - | - | - | - | ■ |
| Thermal memory | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Thermal memory can be switched on/off | - | - | - | - | - | - | ■ | - | ■ | ■ | ■ | - |
| $I_{sd}$ | - | - | - | - | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| $t_{sd}$ at $8 \times I_r$ | - | - | - | - | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Characteristic in S range: I2tsd | - | - | - | - | ■ | - | ■ | - | ■ | ■ | ■ | - |
| Characteristic in S range: selectable $I^2t_{sd}$ / $t_{sd}$ | - | - | - | - | - | - | ■ | - | ■ | ■ | ■ | - |
| $I_i$ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| $I_N$ [1] | - | ■ | ■ | ■ | ■ | - | ■ | - | ■ | ■ | ■ | - |
| $I_g$ | - | - | ■ | - | - | - | - | - | ■ | - | ■ | ■ |
| $t_g$ at $2 \times I_g$ | - | - | ■ | - | - | - | - | - | ■ | - | ■ | ■ |
| Characteristic in G range: $I^2t_g$ | - | - | - | - | - | - | - | - | ■ | - | ■ | ■ |
| Characteristic in G range: selectable $I^2t_g$/$t_g$ | - | - | - | - | - | - | - | - | ■ | - | ■ | ■ |
| Ground-fault alarm function | - | - | - | - | - | - | - | - | ■ | - | ■ | ■ |
| Blocking protection | - | - | - | - | - | - | - | - | - | - | - | ■ |
| ZSI in combination with an EFB external function box | - | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

# 3VA1 Molded Case Circit Breakers up to 1000 A, TM, 415 V, up to 70 kA



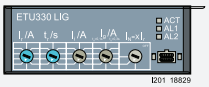
|  | กระแสพิกัด ($I_n$) | กระแสปรับตั้งของการป้องกันกระแสเกิน ($I_r$) | กระแสใช้งานสูงสุดของการป้องกันกระแสลัดวงจร ($I_i$) | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 25kA at 415V Low breaking capacity N (N) | | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 36kA at 415V Standard breaking capacity S (S) | |
|---|---|---|---|---|---|---|---|
| | A | A | A | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** |
| **3 pole , fixed mounted, 3VA11-3VA15, up to 1000A Thermal-magnetic trip unit** | | | | | | | |
| **Line protection, TM220 ATFM** with adjustable overload protection $I_r$ and fixed short-circuit protection $I_i$ | | | | | | | |
| **Connection with box terminal** | | | | | | | |
| **3VA11** | 16 | 11...16 | 320 | 3VA1196-3EE36-0AA0 | 7,510 | 3VA1196-4EE36-0AA0 | 8,110 |
| | 20 | 14...20 | 320 | 3VA1120-3EE36-0AA0 | 7,510 | 3VA1120-4EE36-0AA0 | 8,110 |
| | 25 | 18...25 | 320 | 3VA1125-3EE36-0AA0 | 7,510 | 3VA1125-4EE36-0AA0 | 8,110 |
| | 32 | 22...32 | 320 | 3VA1132-3EE36-0AA0 | 7,510 | 3VA1132-4EE36-0AA0 | 8,110 |
| | 40 | 28...40 | 400 | 3VA1140-3EE36-0AA0 | 7,510 | 3VA1140-4EE36-0AA0 | 8,110 |
| | 50 | 35...50 | 500 | 3VA1150-3EE36-0AA0 | 7,510 | 3VA1150-4EE36-0AA0 | 8,110 |
| | 63 | 44...63 | 630 | 3VA1163-3EE36-0AA0 | 7,510 | 3VA1163-4EE36-0AA0 | 8,110 |
| | 80 | 56...80 | 800 | 3VA1180-3EE36-0AA0 | 8,160 | 3VA1180-4EE36-0AA0 | 8,840 |
| | 100 | 70...100 | 1000 | 3VA1110-3EE36-0AA0 | 9,310 | 3VA1110-4EE36-0AA0 | 10,110 |
| | 125 | 88...125 | 1250 | 3VA1112-3EE36-0AA0 | 14,670 | 3VA1112-4EE36-0AA0 | 15,900 |
| | 160 | 112...160 | 1600 | 3VA1116-3EE36-0AA0 | 16,950 | 3VA1116-4EE36-0AA0 | 18,360 |
| **Line protection, TM240 ATAM** with adjustable overload protection $I_r$ and fixed short-circuit protection $I_i$ | | | | | | | |
| **Connection with lug terminal** | | | | | | | |
| **3VA12** | 250 | 175...250 | 1250...2500 | -- | | 3VA1225-4EF32-0AA0 | 26,050 |
| **3VA13** | 400 | 280...400 | 2000...4000 | -- | | 3VA1340-4EF32-0AA0 | 36,120 |
| **3VA14** | 630 | 440...630 | 2520...5040 | -- | | 3VA1463-4EF32-0AA0 | 51,100 |

|  | กระแสพิกัด ($I_n$) | กระแสปรับตั้งของการป้องกันกระแสเกิน ($I_r$) | กระแสใช้งานสูงสุดของการป้องกันกระแสลัดวงจร ($I_i$) | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 55kA at 415V Medium breaking capacity M (M) | | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 70kA at 415V High breaking capacity H (H) | |
|---|---|---|---|---|---|---|---|
| | A | A | A | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** |
| **3 pole , fixed mounted, 3VA11-3VA15, up to 1000A Thermal-magnetic trip unit** | | | | | | | |
| **Line protection, TM220 ATFM** with adjustable overload protection $I_r$ and fixed short-circuit protection $I_i$ | | | | | | | |
| **Connection with box terminal** | | | | | | | |
| **3VA11** | 16 | 11...16 | 320 | 3VA1196-5EE36-0AA0 | 8,840 | 3VA1196-6EE36-0AA0 | 9,550 |
| | 20 | 14...20 | 320 | 3VA1120-5EE36-0AA0 | 8,840 | 3VA1120-6EE36-0AA0 | 9,550 |
| | 25 | 18...25 | 320 | 3VA1125-5EE36-0AA0 | 8,840 | 3VA1125-6EE36-0AA0 | 9,550 |
| | 32 | 22...32 | 320 | 3VA1132-5EE36-0AA0 | 8,840 | 3VA1132-6EE36-0AA0 | 9,550 |
| | 40 | 28...40 | 400 | 3VA1140-5EE36-0AA0 | 8,840 | 3VA1140-6EE36-0AA0 | 9,550 |
| | 50 | 35...50 | 500 | 3VA1150-5EE36-0AA0 | 8,840 | 3VA1150-6EE36-0AA0 | 9,550 |
| | 63 | 44...63 | 630 | 3VA1163-5EE36-0AA0 | 8,840 | 3VA1163-6EE36-0AA0 | 9,550 |
| | 80 | 56...80 | 800 | 3VA1180-5EE36-0AA0 | 9,590 | 3VA1180-6EE36-0AA0 | 10,470 |
| | 100 | 70...100 | 1000 | 3VA1110-5EE36-0AA0 | 11,020 | 3VA1110-6EE36-0AA0 | 11,920 |
| | 125 | 88...125 | 1250 | 3VA1112-5EE36-0AA0 | 17,320 | 3VA1112-6EE36-0AA0 | 18,890 |
| | 160 | 112...160 | 1600 | 3VA1116-5EE36-0AA0 | 20,090 | 3VA1116-6EE36-0AA0 | 21,860 |
| **Line protection, TM240 ATAM** with adjustable overload protection $I_r$ and fixed short-circuit protection $I_i$ | | | | | | | |
| **Connection with lug terminal** | | | | | | | |
| **3VA12** | 250 | 175...250 | 1250...2500 | 3VA1225-5EF32-0AA0 | 28,990 | 3VA1225-6EF32-0AA0 | 32,930 |
| **3VA13** | 400 | 280...400 | 2000...4000 | 3VA1340-5EF32-0AA0 | 39,540 | 3VA1340-6EF32-0AA0 | 44,710 |
| **3VA14** | 630 | 440...630 | 2520...5040 | 3VA1463-5EF32-0AA0 | 56,260 | 3VA1463-6EF32-0AA0 | 63,640 |
| **3VA15** | 800 | 560...800 | 4000...8000 | 3VA1580-5EF32-0AA0 | 78,860 | 3VA1580-6EF32-0AA0 | 86,970 |
| | 1000 | 700...1000 | 5000...10000 | 3VA1510-5EF32-0AA0 | 110,070 | 3VA1510-6EF32-0AA0 | 120,870 |

# 3VA2 Molded Case Circuit Breakers up to 1600A, TM, 415V, up to 85 kA



| | กระแสพิกัด ($I_n$) | กระแสปรับตั้งของการป้องกันกระแสเกิน ($I_r$) | กระแสใช้งานสูงสุดของการป้องกันกระแสลัดวงจร ($I_i$) | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 55kA at 415V Medium breaking capacity M (M) | | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 85kA at 415V High breaking capacity H (H) | |
|---|---|---|---|---|---|---|---|
| | A | A | A | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** |
| **3 pole , fixed mounted, 3VA21-3VA25, up to 1000A, Electronic trip unit** | | | | | | | |
| **Line protection, ETU320 LI** with adjustable overload protection $I_r$ and adjustable instantaneous short-circuit protection $I_i$ | | | | | | | |
| **Connection with box terminal** | | | | | | | |
| **3VA21** | 25 | 10...25 | 38...300 | 3VA2125-5HL36-0AA0 | 28,530 | 3VA2125-6HL36-0AA0 | 31,450 |
| | 63 | 25...63 | 95...756 | 3VA2163-5HL36-0AA0 | 28,530 | 3VA2163-6HL36-0AA0 | 31,450 |
| | 160 | 63...160 | 240...1600 | 3VA2116-5HL36-0AA0 | 45,290 | 3VA2116-6HL36-0AA0 | 51,220 |
| **Connection with lug terminal** | | | | | | | |
| **3VA22** | 250 | 100...250 | 375...2500 | 3VA2225-5HL32-0AA0 | 57,560 | 3VA2225-6HL32-0AA0 | 65,180 |
| **3VA23** | 400 | 160...400 | 600...4000 | 3VA2340-5HL32-0AA0 | 75,340 | 3VA2340-6HL32-0AA0 | 86,770 |
| **3VA24** | 630 | 250...630 | 945...5670 | 3VA2463-5HL32-0AA0 | 103,700 | 3VA2463-6HL32-0AA0 | 117,660 |
| **3VA25** | 800 | 320...800 | 1200...8000 | 3VA2580-5HL32-0AA0 | 143,480 | 3VA2580-6HL32-0AA0 | 164,230 |
| | 1000 | 400...1000 | 1500...10000 | 3VA2510-5HL32-0AA0 | 197,650 | 3VA2510-6HL32-0AA0 | 226,010 |
| **3VA26** | 1250 | 500...1250 | 1875...12500 | 3VA2612-5HL32-0AA0 | 232,360 | 3VA2612-6HL32-0AA0 | 265,790 |

| | กระแสพิกัด ($I_n$) | กระแสปรับตั้งของการป้องกันกระแสเกิน ($I_r$) | กระแสใช้งานสูงสุดของการป้องกันกระแสลัดวงจร ($I_i$) | Groundfault protection $G/_g$ | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 55kA at 415V Medium breaking capacity M (M) | | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 85kA at 415V High breaking capacity H (H) | |
|---|---|---|---|---|---|---|---|---|
| | A | A | A | | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** |
| **4 pole , fixed mounted, 3VA21 - 3VA27, up to 1600 A, Electronic trip unit** | | | | | | | | |
|  **Line protection, ETU330 LIG** With adjustable overload protection $I_r$, adjustable instantaneous short-circuit protection $I_i$, with neutral protection against overload and short circuit 0%, 50% or 100% (50% only from In ≥ 100 A) and adjustable ground-fault protection $I_g$ | | | | | | | | |
| **Connection with box terminal** | | | | | | | | |
| **3VA21** | 25 | 10...25 | 38...300 | 11...25 | 3VA2125-5HM46-0AA0 | On Request | 3VA2125-6HM46-0AA0 | On Request |
| | 63 | 25...63 | 95...756 | 16...63 | 3VA2163-5HM46-0AA0 | On Request | 3VA2163-6HM46-0AA0 | On Request |
| | 160 | 63...160 | 240...1600 | 32...160 | 3VA2116-5HM46-0AA0 | On Request | 3VA2116-6HM46-0AA0 | On Request |
| **Connection with lug terminal** | | | | | | | | |
| **3VA22** | 250 | 100...250 | 375...2500 | 50...250 | 3VA2225-5HM42-0AA0 | On Request | 3VA2225-6HM42-0AA0 | On Request |
| **3VA23** | 400 | 160...400 | 600...4000 | 80...400 | 3VA2340-5HM42-0AA0 | On Request | 3VA2340-6HM42-0AA0 | On Request |
| **3VA24** | 630 | 250...630 | 945...5670 | 126...630 | 3VA2463-5HM42-0AA0 | On Request | 3VA2463-6HM42-0AA0 | On Request |
| **3VA25** | 800 | 320...800 | 1200...8000 | 160...800 | 3VA2580-5HM42-0AA0 | On Request | 3VA2580-6HM42-0AA0 | On Request |
| | 1000 | 400...1000 | 1500...10000 | 200...1000 | 3VA2510-5HM42-0AA0 | On Request | 3VA2510-6HM42-0AA0 | On Request |
| **3VA26** | 1250 | 500...1250 | 1875...12500 | 250...1250 | 3VA2612-5HM42-0AA0 | On Request | 3VA2612-6HM42-0AA0 | On Request |

| | | กระแสพิกัด ($I_n$) | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 55kA at 415V Medium breaking capacity M (M) | | พิกัดการทนกระแสลัดวงจรสูงสุด Icu up to 85kA at 415V High breaking capacity H (H) | |
|---|---|---|---|---|---|---|
| | | A | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** | **รุ่นสินค้า** | **ราคา / หน่วย (บาท)** |
| **3 pole , fixed mounted versions with toggle** | | | | | | |
| **3VA27** | **Line protection, ETU320 LI** with adjustable overload protection $I_r$ and adjustable instantaneous short-circuit protection $I_i$ Connection with box terminal | 800 | 3VA2780-5AB03-0AA0 | On Request | 3VA2780-6AB03-0AA0 | On Request |
| | | 1000 | 3VA2710-5AB03-0AA0 | On Request | 3VA2710-6AB03-0AA0 | On Request |
| | | 1250 | 3VA2712-5AB03-0AA0 | On Request | 3VA2712-6AB03-0AA0 | On Request |
| | | 1600 | 3VA2716-5AB03-0AA0 | On Request | 3VA2716-6AB03-0AA0 | On Request |
| **4 pole , fixed mounted versions with toggle** | | | | | | |
| | **ETU360 LSIG** with adjustable overload protection $I_r$ and adjustable instantaneous short-circuit protection $I_i$ Connection with box terminal | 800 | 3VA2780-5AD13-0AA0 | On Request | 3VA2780-6AD13-0AA0 | On Request |
| | | 1000 | 3VA2710-5AD13-0AA0 | On Request | 3VA2710-6AD13-0AA0 | On Request |
| | | 1250 | 3VA2712-5AD13-0AA0 | On Request | 3VA2712-6AD13-0AA0 | On Request |
| | | 1600 | 3VA2716-5AD13-0AA0 | On Request | 3VA2716-6AD13-0AA0 | On Request |

# 3VA Molded Case Circuit Breakers

## Accessories



| | รายละเอียดผลิตภัณฑ์ | | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|
| **Auxilliary switches and alarm switches** | | | | |
|  3VA9988-0AA12 | **Auxiliary switch AUX**<br>Type/breaking capacity/size | | | |
| | HQ/compact size/1 slot | | 3VA9988-0AA12 | 980 |
|  3VA9988-0AA12 | **Leading changeover switch LCS**<br>Type/breaking capacity/size | | | |
| | HQ/compact size/1 slot | | 3VA9988-0AA22 | 1,350 |
|  3VA9988-0AA12 | **Trip alarm switch TAS**<br>Type/breaking capacity/size | | | |
| | HQ/compact size/1 slot | | 3VA9988-0AB12 | 980 |
|  3VA9988-0AA12 | **Short-circuit alarm switches SAS (3VA1 only)**<br>For molded case circuit breakers, rated current | | | |
| | For 3VA1 100 A / 160 A<br>• HQ/compact size/1 slot | | 3VA9988-0AA12 | 980 |
| | For 3VA1 250 A / 630A / 1000A<br>• HQ/compact size/1 slot | | 3VA9988-0AB34 | 1,470 |
|  3VA9988-0AA12 | **Electrical alarm switch EAS (3VA2 only)**<br>Type/breaking capacity/size | Electronic-compatible | | |
| | HQ/compact size/1 slot | | 3VA9988-0AB22 | 1,470 |
| **Undervoltage releases** | | | | |
|  3VA9908-0BB15 | Undervoltage release UVR<br>50/60 Hz V AC | V DC | | |
| | --<br>--<br>--<br>-- | 24<br>125 ... 127<br>220 ... 230<br>250 | 3VA9908-0BB11<br>3VA9908-0BB14<br>3VA9908-0BB15<br>3VA9908-0BB16 | 4,500<br>4,500<br>4,500<br>4,500 |
| | 110<br>120 ... 127<br>208 ... 230<br>380 ... 400<br>440 ... 480 | --<br>--<br>--<br>--<br>-- | 3VA9908-0BB23<br>3VA9908-0BB24<br>3VA9908-0BB25<br>3VA9908-0BB26<br>3VA9908-0BB27 | 4,500<br>4,500<br>4,500<br>4,500<br>4,500 |
| **Shunt trip left** | | | | |
|  3VA9908-0BB15 | Undervoltage release UVR<br>50/60 Hz V AC | V DC | | |
| | 24<br>110...127<br>208...277<br>380...600 | 24...30<br>110...127<br>220...250<br>-- | 3VA9988-0BL30<br>3VA9988-0BL32<br>3VA9988-0BL33<br>3VA9988-0BL20 | 3,520<br>3,520<br>3,520<br>3,520 |

# 3VA Molded Case Circuit Breakers

## Accessories



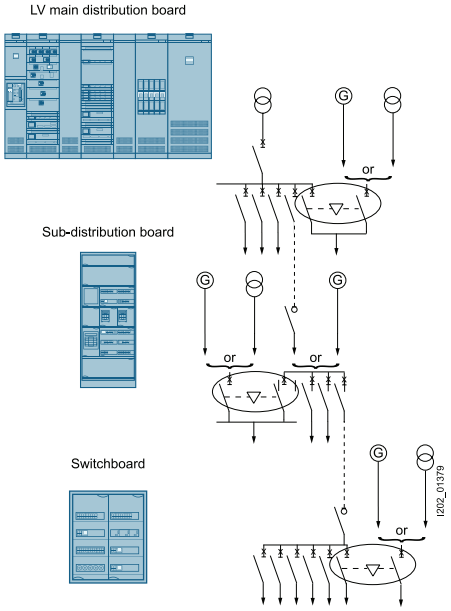
| | รายละเอียดผลิตภัณฑ์ | | For molded case circuit breakers/ frame size | | | | | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|---|---|
| | | | 3VA10 3VA11 | 3VA12 | 3VA20 3VA21 3VA22 | 3VA13 3VA14 3VA23 3VA24 | 3VA15 3VA25 | | |
| **Front mounted rotary operators** | | | | | | | | | |
|  3VM9267-0EK11 | Front mounted rotary operators<br>• Rotary operator<br>• handle<br>• For IEC<br>• Degree of protection IP30<br>• For 3-pole and 4-pole breakers | | | | | | | | |
| | Type | Color | | | | | | | |
| | • Standard, with out illumination kit | Gray | ✓ | -- | -- | -- | -- | 3VA9157-0EK11 | 2,070 |
| | | | -- | ✓ | -- | -- | -- | 3VA9257-0EK11 | 2,320 |
| | | | -- | -- | ✓ | -- | -- | 3VA9267-0EK11 | 2,320 |
| | | | -- | -- | -- | ✓ | -- | 3VA9467-0EK11 | 3,100 |
| | | | -- | -- | -- | -- | ✓ | 3VA9687-0EK11 | 6,620 |
| **Door mount rotary operators** | | | | | | | | | |
|  3VA9267-0FK21 | Door mounted rotary operator<br>• Rotary operator<br>• Shaft 300 mm. (325 mm for 1000 A)<br>• Mounting tolerance compansation<br>• Handle with masking plate 75 x 75 mm.<br>• Degree of protection IP65<br>• For 3-pole and 4-pole breakers | | ✓ | -- | -- | -- | -- | 3VA9157-0FK21 | 3,610 |
| | | | -- | ✓ | -- | -- | -- | 3VA9257-0FK21 | 4,080 |
| | | | -- | -- | ✓ | -- | -- | 3VA9267-0FK21 | 4,080 |
| | | | -- | -- | -- | ✓ | -- | 3VA9467-0FK21 | 5,890 |
| | | | -- | -- | -- | -- | ✓ | 3VA9687-0FK21 | 9,640 |
| **Handles** | | | | | | | | | |
|  | Spare part: Handle lever extension | | -- | -- | -- | ✓ | -- | 3VA9487-0SC10 | 1,110 |
| | Note<br>The handle lever extensions is already included in the scope of supply of the breakers | | -- | -- | -- | -- | ✓ | 3VA9987-0SC10 | 1,540 |
| **Phase barriers suitable for all installation types (fixed-mounted, plug-in and draw-out versions)** | | | | | | | | | |
|  3VA9262-0WA00 | Phase barriers | | ✓ | -- | -- | -- | -- | 3VA9152-0WA00 | 370 |
| | Included in scope of supply:<br>• 2 phase barriers | | -- | ✓ | -- | -- | -- | 3VA9252-0WA00 | 390 |
| | | | -- | -- | ✓ | -- | -- | 3VA9262-0WA00 | 390 |
| | | | -- | -- | -- | ✓ | -- | 3VA9482-0WA00 | 510 |
| | | | -- | -- | -- | -- | ✓ | 3VA9602-0WA00 | 870 |
| **Cover frame for door cut-out** | | | | | | | | | |
|  3VA9163-0SB10 | Cover frame for door cut-out for molded case circuit breaker | | | | | | | | |
| | Versions | | | | | | | | |
| | • 3-pole, door cut-out without trip unit | | ✓ | -- | -- | -- | -- | 3VA9053-0SB10 | 930 |
| | | | -- | ✓ | -- | -- | -- | 3VA9253-0SB10 | 1,130 |
| | | | -- | -- | ✓ | -- | -- | 3VA9163-0SB10 | 1,240 |
| | | | -- | -- | -- | ✓ | -- | 3VA9383-0SB10 | 1,480 |
| | | | -- | -- | -- | -- | ✓ | 3VA9503-0SB10 | 2,230 |
| **Accessories for locking** | | | | | | | | | |
|  3VA9388-0LB10 | Locking devices for toggle levers | | ✓ | ✓ | -- | -- | -- | 3VA9088-0LB10 | 1,760 |
| | | | -- | -- | ✓ | ✓ | -- | 3VA9388-0LB10 | 2,320 |
| | | | | | | | ✓ | 3VA9588-0LB10 | 4,010 |

# Automatic Transfer Switch Controller (ATS)

## Product Overview

อุปกรณ์ควบคุมแหล่งจ่ายไฟฟ้าอัตโนมัติ (ATS) ทำหน้าที่สลับเปลี่ยนแหล่งจ่ายไฟฟ้าหลักไปยังแหล่งจ่ายไฟฟ้าสำรองเมื่อเกิดความผิดปกติในระบบไฟฟ้าอัตโนมัติ โดยจะสั่งงานต่อตรงไปที่เซอร์กิตเบรกเกอร์ หรืออุปกรณ์อื่นๆ ให้ทำการสลับแหล่งจ่ายไฟฟ้า และเมื่อแหล่งจ่ายไฟกลับมาทำงานปกติ อุปกรณ์จะเปลี่ยนแปลงแหล่งจ่าย จากแหล่งจ่ายไฟสำรอง กลับมายังแหล่งจ่ายไฟหลักโดยอัตโนมัติ




| ATS Set 160-630A | Breaker 3VA | |
|---|---|---|
| 3VA97-0HA20 | Motor operate | 2 ตัว |
| 3VA9988-0AA12 | Auxiliary switch AUX | 4 ตัว |
| 3VA9988-0AB12 | Trip alarm switch TAS | 2 ตัว |
| 3VA9088-0VM10 | Rear interlock with rod | 1 ตัว |
| 3VA9088-0VK10 | Profile rail | 1 ตัว |
| 3VA9 8-0VK20 | Mounting plates | 2 ตัว |

| Automatic Transfer Switch Controller | 3 KC ATC3100 | 3 KC ATC6300 | 3 KC ATC6500 |
|---|---|---|---|
| ควบคุมการทำงาน เบรคเกอร์ | 2 ตัว | 3 ตัว | 3 ตัว |
| หน้าจอแสดง บอกสถานะต่างๆ แสดงเตือนค่าต่างๆ | - | ✓ | ✓ |
| สามารถตั้งค่าการทำงาน Programmable | - | ✓ | ✓ |
| สามารถติดโมดุลเพิ่มเติม | - | 2 โมดุล | 3 โมดุล |
| Number of inputs | - | 6, Programmable | 8, Programmable |
| Numer of outputs | - | 7, Programmable | 7, Programmable |
| ขนาดอุปกรณ์ | 171.2 x 131.2 x 99 | 144 x 144 x 43.3 | 180 x 240 x 32.6 |
| **Parameter Values** | | | |
| Phase sequence | -- | ✓ | ✓ |
| Phase failure | - | ✓ | ✓ |
| Minimuj/Maximum voltage | - | ✓ | ✓ |
| Minimuj/Maximum frequency | - | ✓ | ✓ |
| Voltage unbalance | - | ✓ | ✓ |
| Difference in phase displacement angle cos | - | - | ✓ |
| Voltage difference of the two sources | - | - | ✓ |
| Frquency difference of the two sources | - | - | ✓ |

# Automatic Transfer Switch Controller

## Accessories



| | รายละเอียดผลิตภัณฑ์ | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
|  3KC9000-8EL10 | **3KC ATC3100 transfer control device**<br>Control panel instrument 171 x 131 x 99 mm with the following featrues:<br>• Screw terminal connection<br>• Rated setting range: 280 - 460 V AC<br>• Aux. 24 V DC voltage<br>• English tabeling<br>(Chinese labeling on request) | **Screw terminals**<br>**3KC9000-8EL10** | 32,700 |
|  3KC9000-8TL40 | **3KC ATC6300 transfer control device**<br>Control panel instrument 144 x 144 x 43.3 mm with the following featrues:<br>• Screw terminal connection<br>• AC/DC power supply unit:<br>- 100 ... 240 V AC, 45 ... 65 Hz<br>- 7.5 ... 33 V DC<br>- Rated setting range: 100 ... 480 V AC | **Screw terminals**<br>**3KC9000-8TL40** | 76,320 |
|  3KC9000-8TL50 | **3KC ATC6500 transfer control device**<br>Control panel instrument 180 x 240 x 32.6 mm with the following featrues:<br>• Screw terminal connection<br>• AC/DC power supply unit:<br>- 100 ... 240 V AC, 45 ... 65 Hz<br>- 7.5 ... 57.6 V DC<br>- Rated setting range: 100 ... 600 V AC | **Screw terminals**<br>**3KC9000-8TL50** | 140,140 |
| **Expansion modules with communication interfaces** | | | |
|  3KC9000-8TL74 | **ATC6 RS 485 expansion module**<br>Features RS 485 interface<br>**ATC6 Ethernet expansion module**<br>Features Ethernet interface | **3KC9000-8TL74**<br>**3KC9000-8TL75** | 14,080<br>56,060 |
| **USB front interface** | | | |
|  3KC9000-8TL73 | **ATC6 USB front interface**<br>For parameterization on the front using software:<br>• Including mini-USB cable, 1.8 m | **3KC9000-8TL73** | 22,840 |

# 3WT Air Circuit Breakers up to 66kA 4000 A

## Product Overview

จอแสดงผลแบบ LCD Display และมีไฟแบบ LED สำหรับแสดงสถานะการทำงานของเบรกเกอร์ รวมถึงสามารถติดตั้งอุปกรณ์เสริมต่างๆ เพิ่มเติมได้ เพื่อเพิ่มความปลอดภัยแก่ผู้ใช้งานและเพิ่มสเถียรภาพในระบบไฟฟ้า นอกจากนี้ 3WT ยังเป็นเบรกเกอร์ที่มีคุณภาพสูง เหมาะกับการใช้งานได้หลากหลายประเภท ครอบคลุมผู้ใช้งานหลายกลุ่ม ทั้งโรงงาน อาคารสำนักงาน รวมถึงที่พักอาศัย โดยสามารถรองรับการใช้งาน ตั้งแต่ 400A จนถึง 4000A ด้วยค่า breaking capacity (Icu) ที่สูงถึง 66kA ที่ 690V มีทั้งแบบ 3 โพล และ 4 โพล Fixed-mounted version และ Withdrawable version

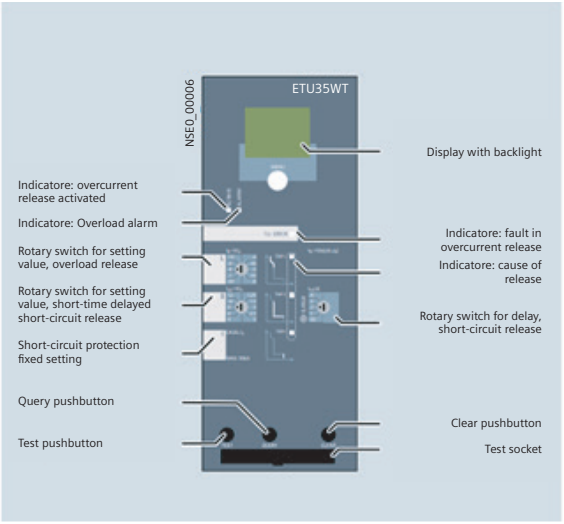






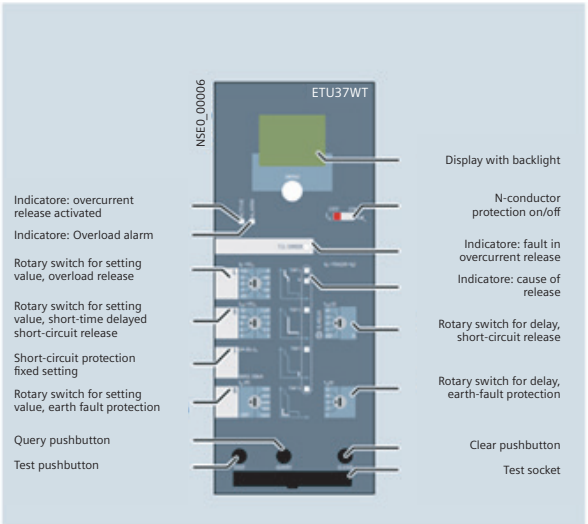
**Electric Trip Unit แสดงผลด้วยจอ LCD Display และใช้ไฟแบบ LED สำหรับแสดงสถานะการทำงาน**

**ETU35WT electronic trip unit**




**ETU35WT ฟังก์ชั่น LSI**

**ETU37WT electronic trip unit**

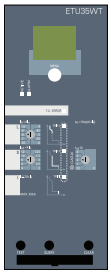


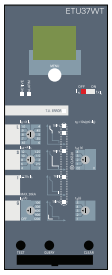

**ETU37WT ฟังก์ชั่น LSING**

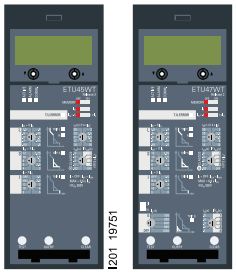
# 3WT Air Circuit Breakers up to 66kA 4000 A

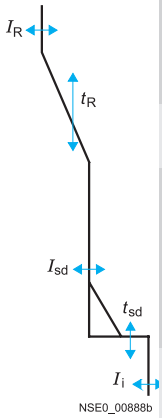
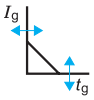
## General Data






| Protection functions<br>Parameterization by | | | ETU35WT<br>D | ETU37WT<br>D & S | ETU45WT/ETU47WT<br>D & S |
|---|---|---|---|---|---|
| ***Functional overview of the electronic trip unit system*** | | | | | |
|  NSE0_00888b | L | **Overload protection**<br>Function can be switched on/off | ✓<br>-- | ✓<br>-- | ✓<br>-- |
| | | Setting range $I_R = I_n \times ...$ | 0.4-0.45-0.5-0.55-0.6-0.65-0.7-0.8-0.9-1 | 0.4-0.45-0.5-0.55-0.6-0.65-0.7-0.8-0.9-1 | 0.4-0.45-0.5-0.55-0.6-0.65-0.7-0.8-0.9-1 |
| | | Setting range for time-lag class $t_R$ at $I^2t$ | 10 s fixed | 10 s fixed | 2-3.5-5.5-8-10-14-17-21-25-30 s |
| | | Thermal image can be switched on/off | -- | -- | ✓ |
| | | Phase failure sensivity | at $t_{sd}$ = 20 ms (M) | at $t_{sd}$ = 20 ms (M) | at $t_{sd}$ = 20 ms (M) |
| | N | **Neutral conductor protection** | -- | ✓ | ✓ |
| | | Function can be switched on/off | -- | ✓ | ✓ |
| | | N conductor setting range $I_N = I_n \times ...$ | -- | 1 | 0.5-1 |
| | S | **Short-time delayed short-circuit protection** | ✓ | ✓ | ✓ |
| | | Function can be switched on/off | -- | -- | ✓ |
| | | Setting range $I_{sd} = I_n \times ...$ | 1.25-1.5-2-2.5-3-4-6-8-10-12 | 1.25-1.5-2-2.5-3-4-6-8-10-12 | 1.25-1.5-2-2.5-3-4-6-8-10-12 |
| | | Setting range for delay time $t_{sd}$ | 0-M-100-200-300-400 ms | 0-M-100-200-300-400 ms | M-100-200-300-400 ms |
| | | Switchable short-time delayed short-circuit protection ($I^2t$-dependent function) | -- | -- | ✓ |
| | | Setting range for delay time $t_{sd}$ at $I^2t$ | -- | -- | 100-200-300-400 ms |
| | I | **Instantaneous short-circuit protection** | ✓ | ✓ | ✓ |
| | | Function can be switched on/off | -- | -- | ✓ |
| | | Setting range $I_i = I_n \times ...$ | fixed for $I_i \geq 20 \geq I_n$, max. 50 kA | fixed for $I_i \geq 20 \geq I_n$, max. 50 kA | 1.5-2.2-3-4-6-8-10-12-0.8 x$I_{cs}$ |
|  NSE0_00889a | G | **Ground-fault protection** | -- | ✓ | ✓ (only ETU47WT) |
| | | Tripping function can be switched on/off | -- | ✓ | ✓ (only ETU47WT) |
| | | Detection of the ground-fault current through summation current formation with internal or external neutral conductor transformer | -- | 3 | ✓ (only ETU47WT) |
| | | Detection of ground-fault current through external transformer | -- | -- | 3 (only ETU47WT) |
| | | Setting range of the operating current $I_g$ for release | -- | OFF-100-300-600-900-1200 | OFF-100-300-600-900-1200 (only ETU47WT) |
| | | Setting range of the delay time $t_g$ | -- | 100-200-300-400-500 ms | 100-200-300-400-500 ms (only ETU47WT) |
| | | Switchable ground-fault protection characteristic curve ($I^2t$-dependent function) | -- | -- | ✓ (only ETU47WT) |
| | | Setting range for delay time $t_g$ at $I^2t$ | -- | -- | 100-200-300-400-500 ms (only ETU47WT) |
| **LCD** | | | | | |
| | | LCD, with backlight | ✓ | ✓ | ✓ |
| **Watchdog** | | | | | |
| | | Watchdog | ✓ | ✓ | ✓ |
| **Communication** | | | | | |
| | | Modbus RTU with COM16WT | -- | -- | ✓ |
| **Metering** | | | | | |
| | | Metering with internal voltage tap | -- | -- | ✓ |
| **LED display** | | | | | |
| | | Electronic trip unit active | ✓ | ✓ | ✓ |
| | | Alarm | ✓ | ✓ | ✓ |
| | | ETU fault | ✓ | ✓ | ✓ |
| | | L-release | ✓ | ✓ | ✓ |
| | | S-release | ✓ | ✓ | ✓ |
| | | I-release | ✓ | ✓ | ✓ |
|  NSE00890 | | N-release | -- | ✓ | ✓ |
| | | G-release | -- | ✓ | ✓ |

Delay time figures given in ms.
M = Motor protection, corresponds to 20 ms.
D = Rotary coding switch.
D & S = Rotary coding and slide switch.

✓ Available.
-- Not available.

# 3WT Air Circuit Breakers up to 4000 A

1

| Option | |
|---|---|
| **Electronic Trip Unit / ETU** | ETU35WT: protection function LSI with LCD display |
| **ETU35WT: protection function LSI with LCD display** | Manual operated mechanism, with mechanical closing<br>Ready to closed indicator with signaling switch<br>With auxiliary switch 2 NO + 2 NC, with shutter tripped signaling trip (1NO) |

| Size | Rated Current $I_n$ | Breaking capacity $I_{cu} = I_{cs}$ | short-time withstand current $I_{cw}$/ 1s, 500V | Fixed mounted version 3-pole | | Withdrawable version 3-pole | |
|---|---|---|---|---|---|---|---|
| | **A** | **kA** | **kA** | **รุ่นสินค้า** | **ราคา (บาท)** | **รุ่นสินค้า** | **ราคา (บาท)** |
| **ETU35WT** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 630 | 66 | 50kA | 3WT8061-5AA00-0AA2 | 112,050 | 3WT8061-5AA04-5AA2 | 140,780 |
| | 800 | | | 3WT8081-5AA00-0AA2 | 115,510 | 3WT8081-5AA04-5AA2 | 145,090 |
| | 1000 | | | 3WT8101-5AA00-0AA2 | 118,650 | 3WT8101-5AA04-5AA2 | 147,960 |
| | 1250 | | | 3WT8121-5AA00-0AA2 | 123,400 | 3WT8121-5AA04-5AA2 | 153,710 |
| | 1600 | | | 3WT8161-5AA00-0AA2 | 139,490 | 3WT8161-5AA04-5AA2 | 173,830 |
| II | 2000 | 66 | 66 | 3WT8202-5AA00-0AA2 | 159,460 | 3WT8202-5AA04-5AA2 | 199,670 |
| | 2500 | | | 3WT8252-5AA00-0AA2 | 208,300 | 3WT8252-5AA04-5AA2 | 260,020 |
| | 3200 | | | 3WT8322-5AA00-0AA2 | 257,140 | 3WT8322-5AA04-5AA2 | 318,920 |
| **Vertical main circuit connection** | | | | | | | |
| II | 4000 | 66 | 66 | 3WT8402-5AA01-0AA2 | 416,180 | 3WT8402-5AA05-5AA2 | 520,550 |
| **Operating mechanism, auxiliary release,auxiliary switch (ตำแหน่งที่ 9 - 11)** | | | | | | | |
| Manual operating mechanism,<br>with mechanical closing,<br>without 1st and 2nd auxiliary releases,<br>with auxiliary switch 2 NO + 2 NC | | | | A A 0 | | A A 0 | |
| Motor operated mechanism,<br>with mechanical and electrical closing,<br>motor and closing solenoid 220-240 V AC 50/60 Hz,<br>220-250 V DC,<br>Shunt release "F" 20-240 V AC 50/60 Hz,<br>220-250 V DC<br>without 2nd auxiliary release, with auxiliary switch 2 NO + 2 NC | | | | U A 3 | | U A 3 | |
| **Under-voltage release (ตำแหน่งที่ 10)** | | | | | | | |
| Under voltage Release instantaneous<br>V AC 50/60 Hz: 208-240, 380-415<br>V DC: 220-250, - | | | | N P V W | | N P V W | |
| Under voltage Release with time delay<br>V AC 50/60 Hz: 208-240, 380-415<br>V DC: 220-250, - | | | | | | | |

* Icw/500V 0.5 s for breaking capacity N

# 3WT Air Circuit Breakers up to 4000 A

| Designation | | | | รุ่นสินค้า | ราคา (บาท) |
|---|---|---|---|---|---|
| **For fixed-mounted and withdrawable circuit breakers** | | | | | |
| **Auxiliary switches** | | | | | |
| 2 CO | | | | 3WT9816-1CE00 | 10,770 |
| 2 NC and 2 NO | | | | 3WT9816-1CD00 | 13,040 |
| **Auxiliary release** | Rated Control | Supply Voltage | | | |
| | AC 50/60 Hz<br>V | DC<br>V | | | |
| Shunt release "f" for<br>1st and 2nd auxiliary release (F1 and F2)<br>and closing solenoid (Y1) | --<br>110 ... 127<br>220 ... 240 | 24<br>110 ... 125<br>220 ... 250 | | 3WT9851-1JB00<br>3WT9851-1JH00<br>3WT9851-1JK00 | 8,800 |
| Undervoltage release "r" (F3)<br>instantaneous 0 ms, short-delay 200 ms | --<br>220 ... 240<br>380 ... 415 | 24<br>220 ... 250<br>-- | | 3WT9853-1JB00<br>3WT9853-1JK00<br>3WT9853-1JM00 | 8,800 |
| Undervoltage release "rc" (F8)<br>can be delayed 0.2 ... 3.2 s | 220 ... 240<br>380 ... 415 | 220 ... 250<br>-- | | 3WT9855-1JK00<br>3WT9855-1JM00 | 12,640 |
| **Motorized operating mechanism** | AC 50/60 Hz<br>V | DC<br>V | | | |
| | --<br>110 ... 127<br>220 ... 240 | 24<br>110 ... 125<br>220 ... 250 | | 3WT9832-1JB00<br>3WT9832-1JH00<br>3WT9832-1JK00 | 46,900 |
| **Motorized operating mechanism and electrical closing** | AC 50/60 Hz<br>V | DC<br>V | | | |
| | 110 ... 127<br>220 ... 240 | 110 ... 125<br>220 ... 250 | | 3WT9831-1JH00<br>3WT9831-1JK00 | 56,170 |
| **Mutual mechanical interlock** | An interlock module with a Bowden wire (2 m)<br>for one fixed-mounted circuit breaker<br>for one withdrawable circuit breaker | | | 3WT9866-3JA00<br>3WT9866-4JA00 | 42,220 |
| | Interlocking of three circuit breakers<br>additional Bowden wire required for each circuit breaker<br>Bowden wire (2 m) | | | 3WT9866-8JA00 | 10,210 |
| | Bowden wire (3 m)<br>Bowden wire (4.5 m) | | | 3WT9866-8JA01<br>3WT9866-8JA02 | 13,060<br>17,950 |
| **5-digit operating cycles counter** | | | | 3WT9864-0CA00 | 32,640 |
| **Locking device consisting of safety locks or padlocks to prevent unauthorized closing of the circuit breaker** | Safety lock (3SB1) instead of the OFF button | Made by CES<br>Normal lock no. SSG 10 | | 3WT9863-1JA00 | 4,830 |
| **Vectorial summation with current transformer in the neutral conductor** | | | | | |
| | Rated current $I_n$ | Size | Number of Poles | | |
| **Current transformers external neutral conductor without copper busbar** | | I<br>II | 3-poles and 4-poles | 3WA9111-0AA21<br>3WA9111-0AA22 | 20,846<br>24,242 |
| **Door sealing frame IP40** | | | | 3WT9886-0JA00 | 5,440 |

# 3WA Air Circuit Breakers

## Product Overview

SENTRON 3WA Air Circuit Breaker ออกแบบมาเพื่อผู้สร้างสรรค์ระบบไฟฟ้ายุคใหม่ หัวใจสำคัญของตู้สวิตช์เกียร์ที่พร้อมรับมือทุกความท้าทายในอนาคตอย่างมั่นใจ สร้างบนรากฐานคุณภาพที่พิสูจน์แล้วของ SENTRON ที่ผสานประสิทธิภาพ ความยืดหยุ่น และความยั่งยืนเข้าด้วยกัน พร้อมโซลูชันครบครันที่รองรับทุกการใช้งาน ขยายฟังก์ชันได้ง่ายด้วยอุปกรณ์เสริมแบบโมดูลาร์ มอบความทนทาน อายุการใช้งานยาวนาน การบำรุงรักษาที่ง่าย และประหยัด เพิ่มความน่าเชื่อถือในระยะยาวให้กับระบบไฟฟ้าของคุณ

1

**Reliable**

**Versatile**

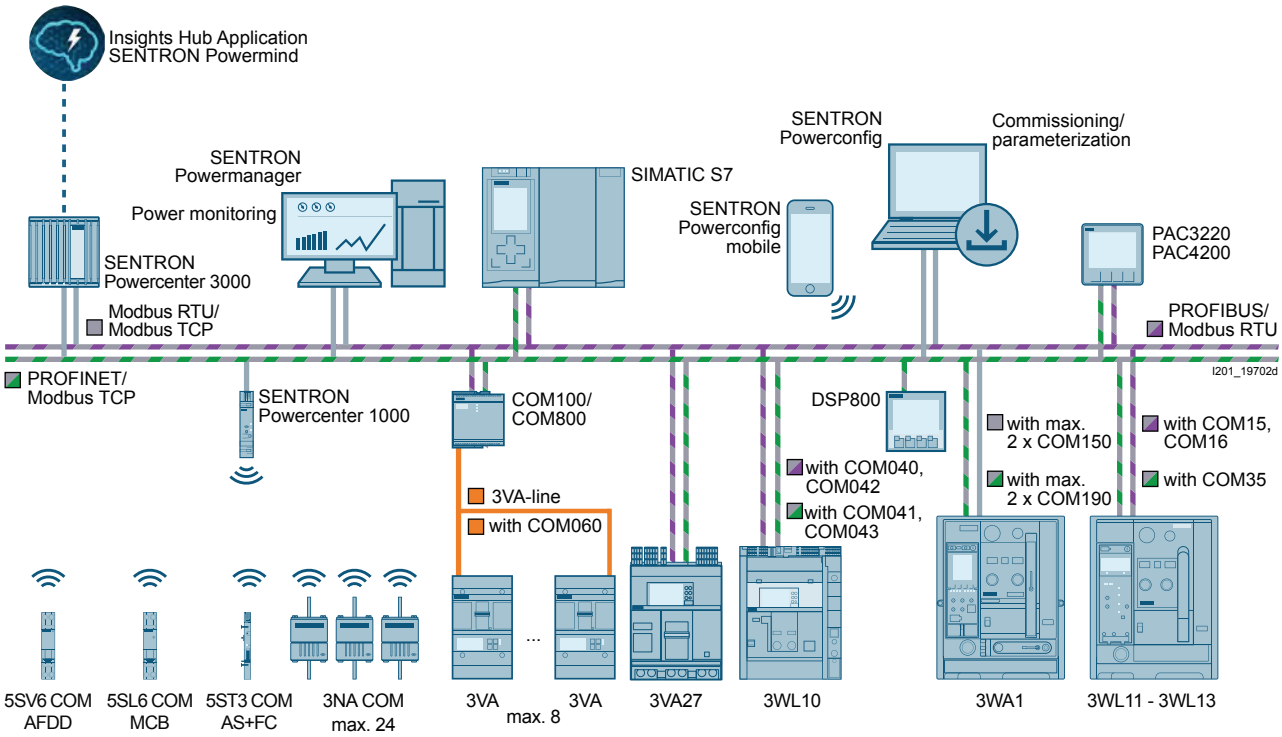
**Perfectly**

Siemens EcoTech

www.siemens.com/lowvoltage/SiemensEcoTech



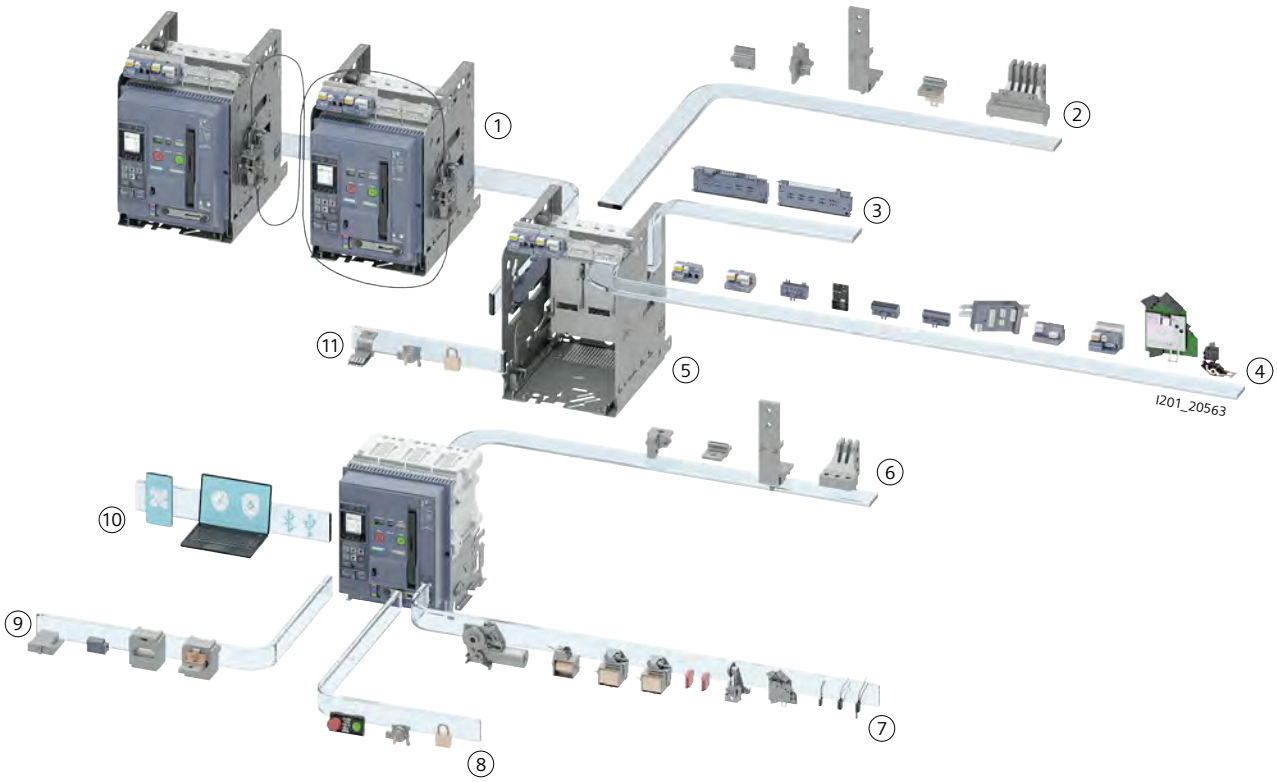
## Communication



# 3WA11 – 3WA13 System Overview

## Circuit breakers and non-automatic circuit breakers for AC and DC






1. Interlocking solutions with Bowden cable
2. Main connection variants for guide frame
3. Position signaling switch (PSS) for the guide frame
4. Interfaces/COM-modules/Aux. terminals
5. Guide frame with shutter
6. Main connection variants for fixed-mounted version
7. Internal accessories:
   aux. release, spring charging motor, aux. contacts
8. Locking solutions for fixed-mounted version
9. Electronic trip units (ETU)
10. Digital function packages can be activated for the ETU
11. Interlocking solutions for withdrawable version

# Electronic Trip Unit

## Differentiation





**ETU600 electronic trip unit**

| Function | |
|---|---|
| Protective function LSI | ■ |
| Protective function LSIG | ■ |
| Protective function LSIG Hi-Z | ■ |
| Neutral conductor protection (N) | ■ |
| Metering function | ■ |
| Enhanced Protective functions | ■ |
| Display | ■ |
| Cubicle Bus[2] | ■ |
| DAS+ input/output | ■ |
| LED display of reason for tripping | ■ |
| Bluetooth and USB | ■ |
| FW Updates | ■ |
| Internal self-test with and without tripping | ■ |
| Extended test option (tripping characteristic) | ■ |
| Activation of the ETU via powerbank | ■ |
| Activation of the ETU for self-test via TD400 | – |

Note:
By replacing the electronic trip unit, it is possible to upgrade from ETU300 to ETU600.

# 3WA: ETU600/LSI



| Option | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Electronic Trip Unit / ETU** | **ETU600: protection function LSI** | | | | | | |
| **Size** | **Rated Current $I_n$ A** | **Breaking capacity Icu = Ics kA** | **short-time withstand current Icw / 1s, 500v kA** | **Fixed mounted version 3-pole รุ่นสินค้า** | **ราคา/หน่วย (บาท)** | **Withdrawable version 3-pole รุ่นสินค้า** | **ราคา/หน่วย (บาท)** |
| **LSI / ETU600/ 55kA / SZ1** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 630 | 55 | 55* | 3WA1106-2AE02-0AA0 | 166,810 | 3WA1106-2AE32-0AA0 | 224,870 |
| | 800 | | | 3WA1108-2AE02-0AA0 | 172,090 | 3WA1108-2AE32-0AA0 | 228,040 |
| | 1000 | | | 3WA1110-2AE02-0AA0 | 181,590 | 3WA1110-2AE32-0AA0 | 239,660 |
| | 1250 | | | 3WA1112-2AE02-0AA0 | 199,540 | 3WA1112-2AE32-0AA0 | 264,990 |
| | 1600 | | | 3WA1116-2AE02-0AA0 | 288,220 | 3WA1116-2AE32-0AA0 | 381,130 |
| | 2000 | | | 3WA1120-2AE02-0AA0 | 363,492 | 3WA1120-2AE32-0AA0 | 481,536 |
| | 2500 | | | 3WA1125-2AE02-0AA0 | 482,448 | 3WA1120-2AE30-0AA0 | 405,080 |
| **LSI / ETU600/ 66kA /Horizontal /SZ I** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 630 | 66 | 66* | 3WA1106-3AE02-0AA0 | 177,370 | 3WA1106-3AE32-0AA0 | 241,770 |
| | 800 | | | 3WA1108-3AE02-0AA0 | 183,700 | 3WA1108-3AE32-0AA0 | 249,160 |
| | 1000 | | | 3WA1110-3AE02-0AA0 | 193,200 | 3WA1110-3AE32-0AA0 | 258,660 |
| | 1250 | | | 3WA1112-3AE02-0AA0 | 213,260 | 3WA1112-3AE32-0AA0 | 286,110 |
| | 1600 | | | 3WA1116-3AE02-0AA0 | 306,170 | 3WA1116-3AE32-0AA0 | 411,740 |
| | 2000 | | | 3WA1120-3AE02-0AA0 | 386,657 | 3WA1120-3AE32-0AA0 | 509,656 |
| | 2500 | | | 3WA1125-3AE02-0AA0 | 513,243 | 3WA1125-3AE31-0AA0 | 691,904 |
| **LSI / ETU600/ 66kA /Horizontal /SZ II** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 3200 | 66 | 66* | 3WA1232-3AE02-0AA0 | 489,870 | 3WA1232-3AE32-0AA0 | 645,060 |
| II | 4000** | | | 3WA1240-3AE02-0AA0 | 684,110 | 3WA1240-3AE32-0AA0 | 901,767 |
| **LSI / ETU600/ 100kA /Horizontal /SZ III** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 5000 | 100 | 100* | 3WA1350-5AE02-0AA0 | 1,165,550 | 3WA1350-5AE32-0AA0 | 1,426,320 |
| III | 6300** | | | 3WA1363-5AE01-0AA0 | 1,554,060 | 3WA1363-5AE31-0AA0 | 1,868,680 |

* Icw/500 V 0.5 s.
** All ACBs are with Horizontal main terminals except 4000A (Size II) & 6300A which have only Vertical main termination
*** Current transformer for overload protection in the neutral conductor and for ground-fault protection must be ordered separately.

**3WA1** 5 6 7 – 8 9 10 11 12 13 14 15 16

| | | SIZ 1 | SIZ 2 | SIZ 3 | | |
|---|---|---|---|---|---|---|
| **Short-circuit breaking capacity /cu at 500/690 V** | N | ■ | - | - | 55/42 kA | 2 |
| | S | ■ | ■ | - | 66/50 kA | 3 |
| | M | ■ | ■ | - | 85/66 kA | 4 |
| | H | ■ 3) | ■ | ■ | 100/85 kA | 5 |
| | C | - | ■ | - | 3-pole: 150/150 kA | 6 |
| | | - | - | ■ | 4-pole: 150/150 kA | 6 |

# 3WA: ETU600/LSIG



**Option**

**Electronic Trip Unit / ETU** ETU600: protection function LSI

| Size | Rated Current $I_n$ A | Breaking capacity Icu = Ics kA | short-time withstand current Icw / 1s, 500v kA | Fixed mounted version 3-pole รุ่นสินค้า | ราคา/หน่วย (บาท) | Withdrawable version 3-pole รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|
| **LSIG / ETU600/ 55kA / SZ1** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 630 | 55 | 55* | 3WA1106-2AF02-0AA0 | 200,590 | 3WA1106-2AF32-0AA0 | 258,660 |
| | 800 | | | 3WA1108-2AF02-0AA0 | 205,870 | 3WA1108-2AF32-0AA0 | 261,830 |
| | 1000 | | | 3WA1110-2AF02-0AA0 | 215,370 | 3WA1110-2AF32-0AA0 | 273,440 |
| | 1250 | | | 3WA1112-2AF02-0AA0 | 234,380 | 3WA1112-2AF32-0AA0 | 298,780 |
| | 1600 | | | 3WA1116-2AF02-0AA0 | 322,000 | 3WA1116-2AF32-0AA0 | 414,910 |
| | 2000 | | | 3WA1120-2AF02-0AA0 | 400,641 | 3WA1120-2AF32-0AA0 | 518,684 |
| | 2500 | | | 3WA1125-2AF02-0AA0 | 519,627 | 3WA1120-2AF30-0AA0 | 442,259 |
| **LSIG / ETU600/ 66kA /Horizontal /SZ I** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 630 | 66 | 66* | 3WA1106-3AF02-0AA0 | 211,150 | 3WA1106-3AF32-0AA0 | 276,610 |
| | 800 | | | 3WA1108-3AF02-0AA0 | 217,480 | 3WA1108-3AF32-0AA0 | 284,000 |
| | 1000 | | | 3WA1110-3AF02-0AA0 | 226,990 | 3WA1110-3AF32-0AA0 | 293,500 |
| | 1250 | | | 3WA1112-3AF02-0AA0 | 247,050 | 3WA1112-3AF32-0AA0 | 319,890 |
| | 1600 | | | 3WA1116-3AF02-0AA0 | 339,950 | 3WA1116-3AF32-0AA0 | 445,530 |
| | 2000 | | | 3WA1120-3AF02-0AA0 | 423,836 | 3WA1120-3AF32-0AA0 | 546,835 |
| | 2500 | | | 3WA1125-3AF02-0AA0 | 550,422 | 3WA1125-3AF31-0AA0 | 729,083 |
| **LSIG / ETU600/ 66kA /Horizontal /SZ II** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 3200 | 66 | 66* | 3WA1232-3AF02-0AA0 | 520,480 | 3WA1232-3AF32-0AA0 | 675,680 |
| II | 4000** | | | 3WA1240-3AF02-0AA0 | 715,273 | 3WA1240-3AF32-0AA0 | 932,905 |
| **LSIG / ETU600/ 100kA /Horizontal /SZ III** | | | | | | | |
| **Horizontal main circuit connection** | | | | | | | |
| I | 5000 | 100 | 100* | 3WA1350-5AF02-0AA0 | 1,195,110 | 3WA1350-5AF32-0AA0 | 1,455,880 |
| III | 6300** | | | 3WA1363-5AF01-0AA0 | 1,582,570 | 3WA1363-5AF31-0AA0 | 1,898,240 |

* Icw/500 V 0.5 s.
** All ACBs are with Horizontal main terminals except 4000A (Size II) & 6300A which have only Vertical main termination
*** Current transformer for overload protection in the neutral conductor and for ground-fault protection must be ordered separately.

**3WA1** 5 6 7 – 8 9 10 11 12 13 14 15 16

| | | SIZ 1 | SIZ 2 | SIZ 3 | | |
|---|---|---|---|---|---|---|
| **Short-circuit breaking capacity /cu at 500/690 V** | N | ■ | - | - | 55/42 kA | 2 |
| | S | ■ | ■ | - | 66/50 kA | 3 |
| | M | ■ | ■ | - | 85/66 kA | 4 |
| | H | ■ 3) | ■ | ■ | 100/85 kA | 5 |
| | C | - | ■ | - | 3-pole: 150/150 kA | 6 |
| | | - | - | ■ | 4-pole: 150/150 kA | 6 |

**External current sensors for the N conductor**



| Version | Fixed-Mounted | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| For mounting on busbar | SZ1 | 3WA9111-0AA21 | 20,846 |
| | SZ2 | 3WA9111-0AA22 | 24,242 |
| | SZ3 | 3WA9111-0AA23 | 31,097 |
| For busbar connection DIN connection | SZ1 | 3WA9111-0AA31 | 25,177 |
| | SZ2 | 3WA9111-0AA32 | 31,783 |
| | SZ3 | 3WA9111-0AA33 | 40,196 |

## Basic configuration for AC circuit breakers and AC non-automatic circuit breakers in a 690 V IT system and for 1000 V

The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wa-configurator

| | | | | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **3WA1** | | | – | | | | | | – | | | |
| **Operating mechanisms, auxiliary switches and auxiliary releases** | | | | | | | | | | | | | | | | |
| **Operating mechanism and auxiliary switch** | Manual recharging of the stored energy mechanism | Without spring charging motor | 2 NO, 2 NC | | | | | | | | | | 0 | | | |
| | | | 2 NO, 4 NC | | | | | | | | | | 1 | | | |
| | Recharging of the stored energy mechanism by spring charging motor (M) | 24 ... 30 V DC | 2 NO, 2 NC | | | | | | | | | | 2 | | | |
| | | | 2 NO, 4 NC | | | | | | | | | | 5 | | | |
| | | 48 ... 60 V DC | 4 NO, 4 NC | | | | | | | | | | 6 | | | |
| | | 110 ... 127 V AC/ | 2 NO, 2 NC | | | | | | | | | | 3 | | | |
| | | 110 ... 125 V DC | 2 NO, 4 NC | | | | | | | | | | 7 | | | |
| | | 208 ... 240 V AC/ | 2 NO, 2 NC | | | | | | | | | | 4 | | | |
| | | 220 ... 250 V DC | 2 NO, 4 NC | | | | | | | | | | 8 | | | |
| **Operating mechanism and auxiliary switch** | Without closing coil | Without spring charging motor | | | | | | | | | | | | A | | |
| | With closing coil (CC/CC-COM) [2] for uninterrupted duty, 100% OP | Without spring charging motor | 24 ... 30 V DC | | | | | | | | | | | B | | |
| | | | 48 ... 60 V DC | | | | | | | | | | | C | | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | | | | | | | | D | | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | | | | | | | | E | | |
| | With remote trip alarm reset coil (RR) for momentary duty 1% OP | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC | | | | | | | | | | | F | | |
| | | | 48 ... 60 V DC | | | | | | | | | | | G | | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | | | | | | | | H | | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | | | | | | | | J | | |
| | With closing coil (CC) for momentary duty, 5% OP | Without spring charging motor | 24 ... 30 V DC | | | | | | | | | | | K | | |
| | | | 48 ... 60 V DC | | | | | | | | | | | L | | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | | | | | | | | M | | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | | | | | | | | N | | |
| | | With remote trip alarm reset coil (RR) for momentary duty 1% OP | 24 ... 30 V DC | | | | | | | | | | | P | | |
| | | | 48 ... 60 V DC | | | | | | | | | | | Q | | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | | | | | | | | R | | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | | | | | | | | S | | |
| **Operating mechanism and auxiliary switch** | Without 2nd auxiliary release | | | | | | | | | | | | | | A | |
| | With shunt trip (ST), uninterrupted duty 100% OP | | 24 ... 30 V DC | | | | | | | | | | | | B | |
| | | | 48 ... 60 V DC | | | | | | | | | | | | C | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | | | | | | | | | D | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | | | | | | | | | E | |
| | With shunt trip (ST), momentary duty 5% OP | | 24 ... 30 V DC | | | | | | | | | | | | F | |
| | | | 48 ... 60 V DC | | | | | | | | | | | | G | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | | | | | | | | | H | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | | | | | | | | | J | |
| | With undervoltage release (UVR), instantaneous (≤ 0.08 s) and short-time delayed (≤ 0.2 s) | | 24 ... 30 V DC | | | | | | | | | | | | L | |
| | | | 48 ... 60 V DC | | | | | | | | | | | | N | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | | | | | | | | | P | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | | | | | | | | | Q | |
| | | | 380 ... 415 V AC | | | | | | | | | | | | R | |
| | With undervoltage release (UVR-t) [3], adjustable delay 0.2 ... 3.2 s | | 24 ... 30 V DC | | | | | | | | | | | | S | |
| | | | 48 ... 60 V DC | | | | | | | | | | | | T | |
| | | | 110 ... 127 V AC/110 ... 125 V DC | | | | | | | | | | | | U | |
| | | | 208 ... 240 V AC/220 ... 250 V DC | | | | | | | | | | | | V | |
| | | | 380 ... 415 V AC | | | | | | | | | | | | W | |

[1] Remote trip alarm reset coil is not available for non-automatic circuit breakers

[2] If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in the factory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.

[3] The maximum allowable cable length to the actuator for quick shutdown is currently 50 m (maximum allowable cable length between the terminals 100 m).

1

## Basic configuration for AC circuit breakers and AC non-automatic circuit breakers in a 690 V IT system and for 1000 V

The structure shown below is intended as an overview of each position and its meaning.
For a complete and valid configuration of your air circuit breaker, please use our online configurator at
www.siemens.com/lowvoltage/3wa-configurator




| Auxiliary releases | | | | |
|---|---|---|---|---|
| **1st auxiliary release** | Without 1st auxiliary release | | | 0 |
| | With shunt trip (ST/ST-COM) 1), uninterrupted duty 100% OP | 24 ... 30 V DC | | 1 |
| | | 48 ... 60 V DC | | 2 |
| | | 110 ... 127 V AC/110 ... 125 V DC | | 3 |
| | | 208 ... 240 V AC/220 ... 250 V DC | | 4 |
| | With shunt trip (ST), momentary duty 5% OP | 24 ... 30 V DC | | 5 |
| | | 48 ... 60 V DC | | 6 |
| | | 110 ... 127 V AC/110 ... 125 V DC | | 7 |
| | | 208 ... 240 V AC/220 ... 250 V DC | | 8 |

1) If the property ready4COM is selected in conjunction with 100% OP closing coils/shunt trips, communication-capable closing coils (CC-COM)/shunt trips (ST-COM) are installed in thefactory. Optionally, this communication capability of the 100% OP closing coils/shunt trips can be deselected with option M71.

# Accessory Options

For a complete and valid configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wa-configurator

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WA....-.....-.... -Z**



## Option plug for electronic trip unit

- Only one module is possible per circuit breaker. As standard, the electronic trip unit is equipped with an option plug which is equal to the maximum rated breaker current ( $/_{n\,max}$ ).
  The rated current of the selected option plug must be less than $/_{n\,max}$ .

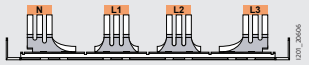
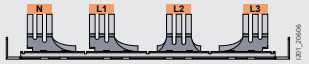
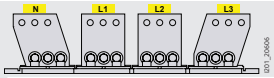
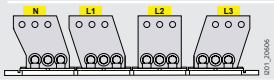
| | Rated current $/_n$ | SIZ 1 | SIZ 2 | SIZ 3 | | Order code |
|---|---|---|---|---|---|---|
| **Option plug** | 250 A | ■ | ■ | - | | **B02** |
| | 315 A | ■ | ■ | - | | **B03** |
| | 400 A | ■ | ■ | - | | **B04** |
| | 500 A | ■ | ■ | - | | **B05** |
| | 630 A | ■ | ■ | - | | **B06** |
| | 800 A | ■ | ■ | ■ | | **B08** |
| | 1000 A | ■ | ■ | ■ | | **B10** |
| | 1250 A | ■ | ■ | ■ | | **B12** |
| | 1600 A | ■ | ■ | ■ | | **B16** |
| | 2000 A | ■ | ■ | ■ | | **B20** |
| | 2500 A | - | ■ | ■ | | **B25** |
| | 3200 A | - | ■ | ■ | | **B32** |
| | 4000 A | - | - | ■ | | **B40** |
| | 5000 A | - | - | ■ | | **B50** |
| **IOM230 digital input/output module** [1] | | | | | | |
| **Module with 2 inputs and 3 outputs** | | | | | A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS² terminating resistor; five modules can be operated at the same time. Further modules must be ordered separately as 3WA9111-0EC11, which includes the adapter for mounting on the secondary disconnect terminal system of the circuit breaker and the adapter for external mounting on a DIN rail. | **F23** |
| **ZSI200 Zone-selective interlocking module** [1] | | | | | | |
| **Zone-selective interlocking with ETU600** | | | | | A module, circuit breaker internal. A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS² terminating resistor | **F20** |
| **COM190 communications module** [1] [2] | | | | | | |
| • The precondition for connection is a circuit breaker or non-automatic circuit breaker with the ready4COM feature | | | | | | |
| **PROFINET IO/Modbus TCP** [2] | | | | | A module including 2 Switched Ethernet ports, circuit breaker internal. A moduleincluding adapter for mounting on the secondary disconnect terminal system of thecircuit breaker, connecting cables and **Cubicle**BUS² terminating resistor; two communications modules can be run at the same time. The second communications module must be ordered separately as 3WA9111-0EC13. | **F19** |
| **COM150 communications module** [1] | | | | | | |
| • The precondition for connection is a circuit breaker or non-automatic circuit breaker with the ready4COM feature | | | | | | |
| **PROFINET IO/Modbus TCP** [2] | | | | | A module with terminal connection and optional internal terminating resistor, circuit breaker internal. A module including adapter for mounting on the secondary disconnect terminal system of the circuit breaker, connecting cables and **Cubicle**BUS² terminating resistor; two communi cations modules can be run at the same time. The second communications module must be ordered separately as 3WA9111-0EC15. | **F15** |
| **ready4COM circuit breakers without communication-capable closing coils/shunt trips** | | | | | | |
| **Note** | | | | | If this option is used, remote switching directly via communication is no longer possible. | **M71** |

[1] When ordering this option for a circuit breaker or a non-automatic air circuit breaker of the installation type "withdrawable version without guide frame", this must be used as the order option for the guide frame.
[2] For connecting the Ethernet cable, connectors angled 90° to the right are recommended, e.g. PROFINET connector 6GK1901-1BB20-2AA0.

# Accessory Options

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WA....-.....-.... -Z**

| | | | | Order code |
|---|---|---|---|---|
| **Automatic reset** | | | | |
| • Only possible for circuit breakers with an electronic trip unit | | | | |
| **Automatic reset** | Automatic reset of the reclosing lockout after ETU tripping; this option is not required when ordering a circuit breaker with a remote trip alarm reset coil RR. | | | |
| **Circuit breakers with a metering function for connection of an external voltage transformer** | | | | |
| • The circuit breaker is equipped with a metering function. The scope of measured values is the same as for the PMF metering function. Unlike the metering function with internal voltage tap, this version is not certified according to IEC 61557-12.<br>• External voltage transformers are required for the function.<br>• Only possible for circuit breakers of frame sizes 2 and 3 with ETU600 and A or C in position 9 of the article number. | | Scope of measured values<br>Metering function | PMF-I<br>PMF-II<br>PMF-III | |
| **Special approval according to UL 489b in addition to IEC 60947** | | | | |
| **DC non-automatic circuit breakers up to 1500 V** | Sizes 2, 4-pole, 2000 A with $I_{cc}$ = 20 kA<br>Available for: 3WA1220-8AU12-_ _ _ _<br>3WA1220-8AU42-_ _ _ _<br>3WA1220-8AU72-_ _ _ _<br>3WA1220-8CU12-_ _ _ _<br>3WA1220-8CU42-_ _ _ _<br>3WA1220-8CU72-_ _ _ _ | | | |
| **Rear main connections (top and bottom) with same pole spacing of phases (only possible for 4-pole circuit breakers with N pole, left)** | | | | |
| **AC circuit breakers/ AC non-automatic circuit breakers and AC guide frames** | Sizes 2, 4-pole, 4000 A breaking capacity S/M/H/E | | | **D04** |
| | Rear vertical |  | Standard | N – L1 160 MM<br>L1 – L2 130 MM<br>L2 – L3 160 MM |
| | |  | Option | N – L1 130 MM<br>L1 – L2 160 MM<br>L2 – L3 160 MM |
| | Rear horizontal |  | Standard | N – L1 160 MM<br>L1 – L2 130 MM<br>L2 – L3 160 MM |
| | |  | Option | N – L1 130 MM<br>L1 – L2 160 MM<br>L2 – L3 160 MM |
| **Tinned version of the main circuit connections on the guide frame** | | | | |
| • Only for withdrawable circuit breakers with horizontal connection or flange connection<br>• Cannot be ordered for circuit breakers without a guide frame<br>• The normal delivery time increases to 15 work days | | | | |
| **Tinned connectionst** | Sizes 1, 2, 3 | | | **D08** |
| **Broadened vertical main circuit connection** | | | | |
| • Only possible on complete order for a withdrawable circuit breaker or when ordering the guide frame separately | | | | |
| **Main circuit connection** | For 3WA1, 4000 A, size 2 | | Compatible with 3WL1240 for retrofit | **D01** |
| **Circuit breakers without Bluetooth function** | | | | |
| **Circuit breakers without Bluetooth function** | In this version of the circuit breaker, Bluetooth is not provided. Neither can Bluetooth be retrofittedby replacing the electronic trip unit. | | | **D80** |
| **Secondary disconnect terminal system** | | | | |
| • Can be ordered for circuit breakers with guide frames and for guide frames | | | | |
| **Manual connector with screw terminal** | With screw connection instead of push-in connection (standard) | | | **N03** |
| **Manual connector for ring lugs** | With screw connection for ring lugs instead of push-in connection (standard) | | | **N05** |
| **Mechanical operating cycles counters** | | | | |
| **Mechanical operating cycles counter, 5-digit** | Can be used with all circuit breakers and non-automatic circuit breakers including those without a spring charging motor | | | **C01** |
| **Signaling switches** | | | | |
| **Trip alarm switch** | 2nd trip alarm switch (S25) 1st trip alarm switch included as standard for circuit80 breakers.<br>Can only be used with circuit breakers with an electronic trip unit without ready4COM. | | 1 NO | **K06** |

# Accessory Options

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WA....-.....-.... -Z**

| | | | Order code |
|---|---|---|---|
| **Pushbuttons/disconnect switches/closing lockouts/special packaging/arc chute cover** | | | |
| **Emergency OPEN button** | Mushroom pushbutton instead of the mechanical OFF pushbutton | | **C25** |
| **Local electric close on operator panel (S10)** | This prevents unauthorized electrical closing from the operator panel. Mechanical closing and remote closing remain possible. Only possible in combination with a closing coil (CC) | With sealing cap | **C11** |
| | | With CES lock | **C12** |
| **Motor disconnect switch on operator panel (S12)** | This prevents automatic charging of the stored energy mechanism by the spring charging motor | | **C24** |
| **Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)** | | | **P61** |
| **Arc chute cover mounted on the guide frame** | Not available for:<br>– Fixed-mounted<br>– Breaking capacity C, E and D<br>– 3600/4000 A size 2 | | **R10** |
| **Cover for electronic trip unit** | Top cover with safety lock<br>(The lower sealable cover of the rotary coding switch is included in the scope of supply of the circuit breaker) | | **F40** |
| **Internal current sensors without energy core for applications with frequency converters**<br>• Used in converter applications with high harmonic components; can only be used for circuit breakers with an ETU600 electronic trip unit<br>– External 24 V DC supply required<br>– Instantaneous undervoltage release UVR required (15th position in article number: L, N, P, Q, R)<br>– Not possible with delayed undervoltage release UVR-t (15th position in article number: S, T, U, V, W)<br>– Additionally contains a relay for monitoring the 24 V DC and warning labels<br>– If Z option = K60 is provided, an optional PMF-I to PMF-III metering function is feasible. The accuracy of this metering function is in accordance with the manufacturer's specifications. A certificate according to IEC 61557-12 cannot be provided for this version. | | | |
| **Internal current sensors** | Sizes 1 , 2, 3 | | **K60** |
| **Mechanical interlocks**<br>• Interlocking module with Bowden cable 2 m | | | |
| **Mechanical interlocks** | For fixed-mounted breakers | | **S55** |
| | For withdrawable circuit breakers with guide frame [1] | | **R55** |
| | For guide frames (ordered separately) | | **R56** |
| | For withdrawable circuit breakers (ordered separately) | | **R57** |
| **Locking provisions (for fixed-mounted and withdrawable circuit breakers)** | | | |
| **Locking provisions** | Against unauthorized closing from the operator panel of the circuit breaker. The disconnector unit fulfills the requirements for main circuit breakers according to EN 60204-1 | Made by CES | **S01** |
| | | Made by IKON | **S03** |
| | | Assembly kit FORTRESS or CASTELL [2] | **S05** |
| | | Assembly kit for padlocks [3] | **S07** |
| | | Made by RONIS | **S08** |
| | | Made by PROFALUX | **S09** |
| **Locking provisions** | For charging handle with padlock 3) | | **S33** |
| **Locking provisions (for withdrawable circuit breaker)** | | | |
| **Locking provision to prevent movement of the withdrawable circuit breaker** | Safety lock for mounting onto the circuit breaker | Made by CES | **S71** |
| | | Made by IKON | **S75** |
| | | Made by RONIS | **S76** |

[1] Not available in combination with R40
[2] Locks must be ordered from the manufacturer.
[3] Padlock not included in the scope of supply.

# Accessory Options

To specify the options, add "-Z" to the complete article number and indicate the appropriate order code(s).

**3WA....-.....-.... -Z**

| | | Order code |
|---|---|---|
| **Locking provisions against unauthorized closing, for withdrawable circuit breakers**<br>• Used in converter applications with high harmonic components; can only be used for circuit breakers with an ETU600 electronic trip unit<br>• The disconnector unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the guide frame, active in the connected position, function is retained when circuit breaker is replaced.<br>• Not possible in combination with order code "R81", "R85" or "R86".<br>• Only possible on complete order for a withdrawable circuit breaker or when ordering the guide frame separately | | |
| **Made by CES** | | **R61** |
| **Made by IKON** | | **R68** |
| **Made by PROFALUX** | | **R60** |
| **Locking mechanisms**<br>• R30 and R50 not possible in combination with order code "R81", "R85" or "R86".<br>• R30 and R50 only possible on complete order for a circuit breaker with a guide frame or when ordering the guide frame separately<br>• R40 can only be ordered with the circuit breaker | | |
| **For fixed-mounted circuit breakers** | To prevent opening of the control cabinet door in ON position | **S30** |
| **For withdrawable circuit breakers** | To prevent opening of the control cabinet door in connected position | **R30** |
| | To prevent activation when the control cabinet door is open 1) | **R40** |
| | To prevent movement when the control cabinet door is open 2) | **R50** |
| **Locking provisions to prevent movement of the withdrawable circuit breaker in disconnected position**<br>• Consisting of Bowden cable and lock in the control cabinet door<br>• Not possible in combination with order code "R30", "R50", "R61", "R68" or "R60"<br>• Only possible for a complete order for a circuit breaker with a guide frame or when ordering the guide frame separately | | |
| **Made by CES** | | **R81** |
| **Made by IKON** | | **R85** |
| **Made by PROFALUX** | | **R86** |
| **Increased degree of protection for installation in a control cabinet** | | |
| **Door sealing frame for degree of protection IP41** | | **T40** |

[1] Not available in combination with R50 and R55
[2] Not available in combination with R40

# Accessories for Electronic Trip Unit



## External current sensors for the N conductor



| Version | Size | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| For mounting on busbar | 1 | 3WA9111-0AA21 | 20,846 |
| | 2 | 3WA9111-0AA22 | 24,242 |
| | 3 | 3WA9111-0AA23 | 31,097 |
| For busbar connection DIN connection | 1 | 3WA9111-0AA31 | 25,177 |
| | 2 | 3WA9111-0AA32 | 31,783 |
| | 3 | 3WA9111-0AA33 | 40,196 |

## Closing coil (CC)/shunt trip (ST) [1]



- Suitable for uninterrupted duty

| Version | Voltage | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| 100% OP | 24 ... 30 V DC | 3WA9111-0AD12 | 11,061 |
| Switching time ≤ 80 ms | 48 ... 60 V DC | 3WA9111-0AD14 | 11,061 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AD15 | 11,061 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AD16 | 11,061 |

## Closing coil (CC-COM)/shunt trip (ST-COM)



- Suitable for uninterrupted duty

| Version | Voltage | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| For circuit breakers and non-automatic | 24 ... 30 V DC | 3WA9111-0AD32 | 11,061 |
| circuit breakers with the ready4com feature | 48 ... 60 V DC | 3WA9111-0AD34 | 11,061 |
| 100% OP Switching time ≤ 80 ms | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AD35 | 11,061 |
| Switching time via COM ≤ 120 ms | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AD36 | 11,061 |

## Closing coils (CC) [1]



- For momentary duty, with cut-off switch S15 (NC)

| Version | Voltage | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| 5% OP | 24 ... 30 V DC | 3WA9111-0AD12 | 11,061 |
| Switching time 50 ms | 48 ... 60 V DC | 3WA9111-0AD14 | 11,061 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AD15 | 11,061 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AD16 | 11,061 |

## Shunt trips (ST) [1]



- For momentary duty, with cut-off switch S14 (NO)

| Version | Voltage | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| 5% OP | 24 ... 30 V DC | 3WA9111-0AD22 | 11,061 |
| Switching time 50 ms | 48 ... 60 V DC | 3WA9111-0AD24 | 11,061 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AD25 | 11,061 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AD26 | 11,061 |

## Capacitor trip device



- For shunt trips
- Storage time 5 min
- Also suitable for 3VL, 3VA, 3WL and 3WN circuit breakers
- Note: Rated control supply voltage must match the rated control supply voltage of the shunt trips.

| Rated control supply voltage/rated operational voltage | | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| 50/60 Hz AC | DC | | |
| 208 ... 240 V | 220 ... 250 V | 3WA9111-0AD81 | 39,573 |

## Undervoltage release (UVR) [1]



| Version | Voltage | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| Instantaneous ≤ 0.08 s (UVR) and | 24 ... 30 V DC | 3WA9111-0AE02 | 10,440 |
| short-time delayed ≤ 0.2 s | 48 ... 60 V DC | 3WA9111-0AE04 | 9,930 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AE05 | 10,440 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AE06 | 10,440 |
| | 380 ... 415 V AC | 3WA9111-0AE07 | 10,440 |
| Delayed (UVR-t) [2] | 24 ... 30 V DC | 3WA9111-0AE13 | 39,440 |
| adjustable delay 0.2 ... 3.2 s | 48 ... 60 V DC | 3WA9111-0AE14 | 39,440 |
| | 110 ... 125 V DC/110 ... 127 V AC | 3WA9111-0AE15 | 37,500 |
| | 220 ... 250 V DC/208 ... 240 V AC | 3WA9111-0AE16 | 37,500 |
| | 380 ... 415 V AC | 3WA9111-0AE17 | 41,180 |

[1] Article numbers also apply to 3WL see page 1/116

[2] The maximum allowable cable length to the actuator for quick shutdown is currently 50 m (maximum allowable cable length between the terminals 100 m).

# Operating Mechanism [1)]

## Spring charging motor to charge the stored energy mechanism



| Voltage | รุ่นสินค้า |
|---|---|
| 24 ... 30 V DC | 51,930 |
| 48 ... 60 V DC | 49,440 |
| 110 ... 125 V DC/110 ... 127 V AC | 51,930 |
| 220 ... 250 V DC/208 ... 240 V AC | 51,930 |

[1)] Article numbers also apply to 3WL see page 1/116

## Closing coil (CC-COM)/shunt trip (ST-COM)



| Contacts | รุ่นสินค้า |
|---|---|
| 2 NO + 2 NC | 11,373 |
| 2 NO | 5,671 |
| 1 NO + 1 NC | 5,671 |

# Power Monitoring Made Simple

ประหยัดพลังงานกับ SENTRON ได้แล้ววันนี้



# Measuring Devices, Power Monitoring and Digitalzation Solutions | Quick Selection Guide

## Hardware component

Industry






| | 7KM PAC1020 | 7KM PAC2200 | 7KM PAC2200CLP | 7KM PAC3200T |
|---|---|---|---|---|
| **Type of mounting** | | | | |
| Front mounting \| DIN rail \| Screw mounting | ■ \| – \| – | – \| ■ \| – | – \| ■ \| – | – \| ■ \| – |
| Withdrawable \| Fixed-mounted | – \| – | – \| – | – \| – | – \| – |
| **Measuring connection** | | | | |
| Direct measurement | – | ■ | ■ | – |
| Transformer measurement | ■ | ■ | ■ | ■ |
| Multichannel measuring system | – | – | – | – |
| **Suitable transformers** | | | | |
| Window-type current transformers | ■ | ■ | ■ | ■ |
| Folding transformer | ■ | ■ | ■ | ■ |
| ntegrated transformer | – | – | – | – |
| **Commissioning** | | | | |
| MID version \| Load profile (PTB) \| PTB firmware update | – \| – \| – | ■ \| – \| – | ■ \| ■ \| – | – \| – \| – |
| Hardware write protection | – | ■ | ■ | ■ |
| Max. input voltage L-L/L-N | 400 V/ 230 V | 400 V/ 230 V | 400 V/ 230 V | 400 V/ 230 V |
| Transformer connection version | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A |
| Direct connection version | – | 65 A | 65 A | – |
| DC power supply unit with extra-low voltage version | – | – | – | – |
| -phase counter version | – | ■ | ■ | – |
| Electrically isolated voltage inputs | – | – | – | – |
| Version without display (for web interface) | – | – | – | ■ |
| **Evaluation** | | | | |
| **Measured quantities** | | | | |
| Average value of measured values | – | ■ | ■ | ■ |
| Voltage, current, frequency | ■ | ■ | ■ | ■ |
| Power, power factor | ■ | ■ | ■ | ■ |
| **Energy measurement** | | | | |
| Daily energy storage | ■ | > 221 days | > 10 years | > 221 days |
| Monthly energy storage | ■ | > 25 months | > 10 years | > 25 months |
| Yearly energy storage | ■ | > 7 years | > 10 years | > 7 years |
| Apparent \| Active \| Reactive energy \| p.f. \| power factor | ■ \| ■ \| ■ \| – \| ■ | ■ \| ■ \| ■ \| – \| ■ | ■ \| ■ \| ■ \| – \| ■ | ■ \| ■ \| ■ \| – \| ■ |
| Distortion factor THD (voltage, current) | – | – | – | ■ |
| Harmonics (voltage, current) | – | – | – | – |
| Phase angle/phase chart | – | – | – | – |
| Load profile recording | – | – | ■ | – |
| Flicker acc. to IEC 61000-4-15 | – | – | – | – |
| **Monitoring functions** | | | | |
| Operating hours counter | – | – | – | ■ |
| Limit monitoring | – | – | – | ■ |
| Logic functions | – | – | – | ■ |
| Event log | – | – | – | – |
| Gateway function | – | – | – | – |
| Reporting acc. to EN 50160 | – | – | – | – |
| ntegrated fault recorder | – | – | – | – |
| **ntegrated communications interfaces** | | | | |
| Digital inputs/digital outputs | 1/1 | 1/1 | 1/1 | 1/1 |
| S0 interface | ■ | ■ | ■ | ■ |
| M-Bus | – | ■ | – | – |
| RS485 (Modbus RTU) | ■ | ■ | – | – |
| Ethernet with Modbus TCP | – | ■ | ■ | ■ |
| BACnet | – | – | – | – |

# Measuring Devices, Power Monitoring and Digitalzation Solutions | Quick Selection Guide



## Industry

| |  |  |  |  |  |
|---|---|---|---|---|---|
| | **7KM PAC3120 Standard \| MID** | **7KM PAC3220 Standard \| MID** | **7KM PAC4220** | **SICAM Q100** | **SICAM Q200** |
| | | | | | |
| | ■\|–\|– | ■\|–\|– | ■\|–\|– | ■\|■\|– | ■\|–\|– |
| | –\|– | –\|– | –\|– | –\|– | –\|– |
| | | | | | |
| | – | – | – | – | – |
| | ■ | ■ | ■ | ■ | ■ |
| | – | – | – | – | – |
| | | | | | |
| | ■ | ■ | ■ | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ |
| | – | – | – | – | – |
| | | | | | |
| | –\|–\|– ■\|–\|■ | –\|–\|– ■\|–\|■ | –\|–\|– | –\|–\|– | –\|–\|– |
| | ■ | ■ | ■ | – | – |
| | 690 V/ 400 V 400 V/ 230 V | 690 V/ 400 V 400 V/ 230 V | 690 V/ 400 V | 690 V/ 400 V | 690 V/ 400 V |
| | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A | x/1 A or x/5 A |
| | – | – | – | – | – |
| | 24 ... 60 V DC ±20% – | 24 ... 60 V DC ±20% – | 24 ... 48 V DC ±25% | 24 ... 250 V DC | 110 ... 250 V D [1] |
| | – | – | – | – | – |
| | – | – | – | ■ | ■ |
| | – | – | – | ■ | – |
| | | | | | |
| | | | | | |
| | ■ | ■ | ■ | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ |
| | | | | | |
| | > 221 days | > 221 days | > 10 years | ■ | ■ |
| | > 25 months | > 25 months | > 10 years | ■ | ■ |
| | > 7 years | > 7 years | > 10 years | ■ | ■ |
| | ■\|■\|■\|■\|■ | ■\|■\|■\|■\|■ | ■\|■\|■\|■\|■ | ■\|■\|■\|■\|■ | ■\|■\|■\|■\|■ |
| | ■ | ■ | ■ | ■ | ■ |
| | – | – | 2. bis 64. | ■ | ■ |
| | – | – | ■ | ■ | ■ |
| | – | – | ■ | ■ | ■ |
| | – | – | – | ■ | ■ |
| | | | | | |
| | ■ | ■ | ■ | – | – |
| | ■ | ■ | ■ | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ |
| | – | – | > 4000 events | ■ | ■ |
| | – | – | ■ | ■ | ■ |
| | – | – | – | ■ | ■ |
| | – | – | – | ■ | ■ |
| | | | | | |
| | 2/2 | 2/2 | 2/2 | 2/2 | 6/6 |
| | ■ | ■ | ■ | – | – |
| | – | – | – | – | – |
| | ■ | – | – | ■ | ■ |
| | – | ■ | ■ | ■ | ■ |
| | – | – | – | – | – |

## 7KT PAC1020 (Modbus RTU)



**I,V,P,PF,f, Apparent ,Active-Reactive energy**

Power supply input: 85V – 276Vac
Transformer connection version /1A , /5 A
Digital 1 inputs 1 outputs
Active energy and active power: Accuracy 1%

| Model | Ordercode | ราคา (บาท) |
|---|---|---|
| PAC 1020 | 7KM1020-0BA01-1DA0 | 10,010 |

## 7KT PAC1600 (Modbus RTU)



**I,V,P,PF,f, Apparent ,Active-Reactive energy**
**Operating hours counter**

Max. input voltage L-L / L-N 400 V / 230 V
Transformer connection version /1A, /5 A
Digital 1 inputs 1 outputs
DIN Rail mount
Accurcy Class 1 for 1phase/0.5s for 3phase

| Interface | Ordercode | ราคา (บาท) |
|---|---|---|
| Direct 1phase (63A) | 7KT1651 | 13,820 |
| Direct 3phase (80A) | 7KT1665 | 17,760 |
| Indirect 3phase | 7KT1661 | 16,450 |

Mbus, MID version ,please contact Siemens

## 7KM PAC2200



**I,V,P,PF,f, Apparent ,Active-Reactive energy**
**Operating hours counter**
**Average value of measured values**

Max. input voltage L-L / L-N 480 V / 277 V
Transformer connection version /1A, /5 A
Digital 1 inputs 1 outputs
DIN Rail mount
Active energy and power Accuracy 0.5% IEC 61557-12

| Interface | Measurement | Ordercode | ราคา (บาท) |
|---|---|---|---|
| Modbus RTU | Direct (65A) | 7KM2200-2EA40-1DA1 | 17,760 |
| | Indirect | 7KM2200-2EA30-1DA1 | |
| Modbus TCP | Direct (65A) | 7KM2200-2EA40-1EA1 | 18,420 |
| | Indirect | 7KM2200-2EA30-1EA1 | |

Mbus, MID version ,please contact Siemens

## 7KM PAC 3120 (Modbus RTU)



**I,V,P,PF,f, Apparent ,Active-Reactive energy**
**Operating hours counter**
**Average value of measured values**
**Distortion factor THD (voltage, current)**

Power supply input: 95V – 240Vac /110-340 V DC (±10 %)
Max. input voltage L-L / L-N 690 V / 400 V
Transformer connection version /1A, /5 A
Digital 2 inputs 2 outputs
Active energy and power Accuracy 0.5% IEC 61557-12

| Model | Ordercode | ราคา (บาท) |
|---|---|---|
| PAC 3120 | 7KM3120-0BA01-1DA0 | 21,720 |

Other power supply range in avaliable contact Siemens

## 7KM PAC 3220 (Modbus TCP)



**I,V,P,PF,f, Apparent ,Active-Reactive energy**
**Operating hours counter Average value of measured values Distortion factor THD (voltage, current)**
**Inbuilt Webserver, Double comunication port**

Power supply input: 95V – 240Vac /110-340 V DC (±10 %)
Max. input voltage L-L / L-N 690 V / 400 V
Transformer connection version /1A, /5 A
Digital 2 inputs 2 outputs
Active energy and power Accuracy 0.5% IEC 61557-12

| Model | Ordercode | ราคา (บาท) |
|---|---|---|
| PAC 3220 | 7KM3220-0BA01-1DA0 | 42,110 |

Other power supply range in avaliable contact Siemens

## 7KM PAC 4220 (Modbus TCP)



**Operating hours counter ,Cos Φ**
**Harmonics (voltage, current) 64th**
**Phase angle/phase chart Event log**
**Load profile recording**
**Gateway function, Inbuilt Webserver**

Power supply input: 95V – 240Vac /110-340 V DC (±10 %)
Max. input voltage L-L / L-N 690 V / 400 V (AC/DC)
Transformer connection version /1A, /5 A
Digital 2 inputs 2 outputs
Active energy and power Accuracy 0.2s

| Model | Ordercode | ราคา (บาท) |
|---|---|---|
| PAC 4220 | 7KM4220-0BA01-1EA0 | 73,290 |

Other power supply range in avaliable contact Siemens

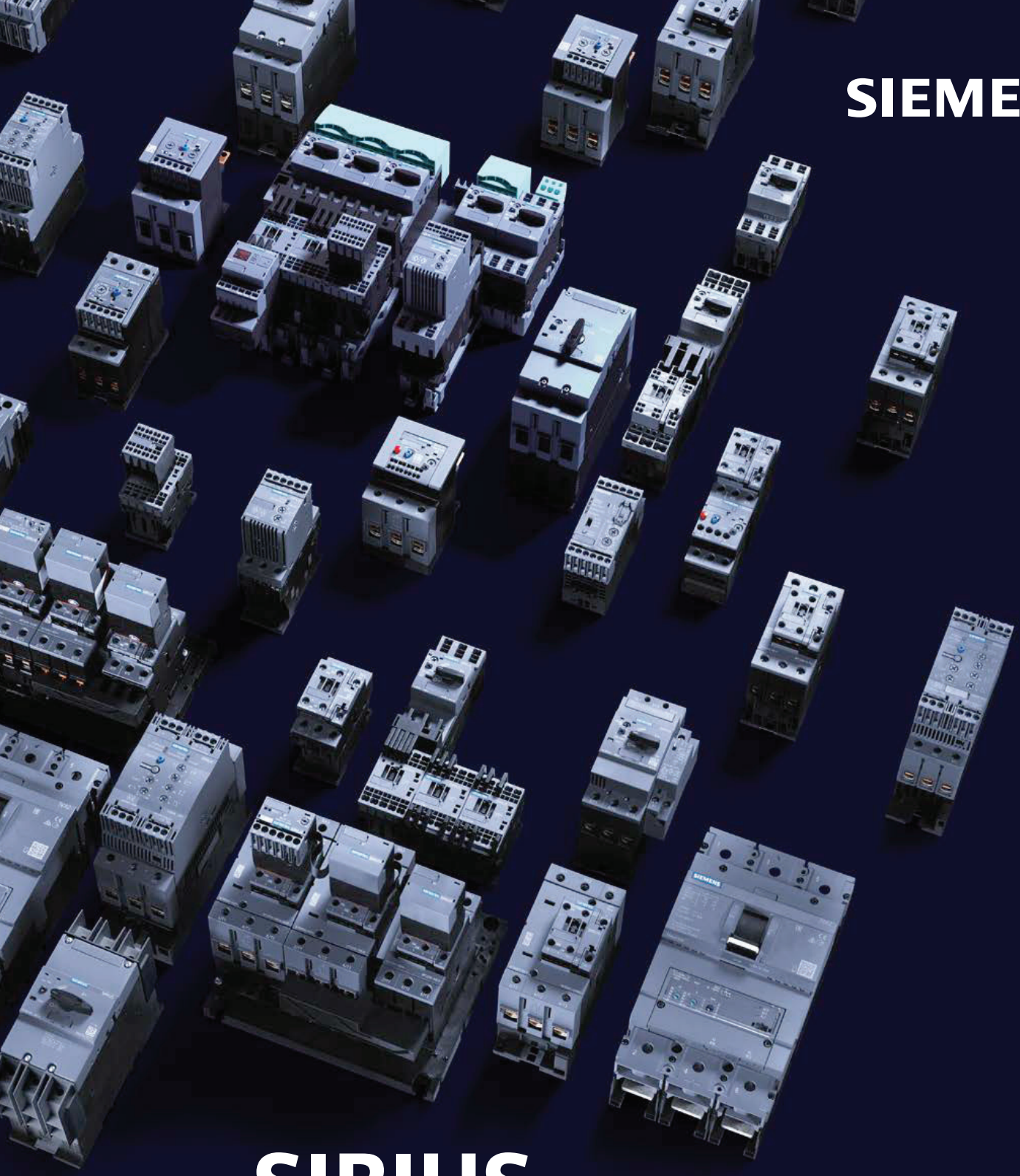
## Expansion and communication modules

PAC3220 and PAC 4220



| Interface | Ordercode | ราคา (บาท) |
|---|---|---|
| PROFIBUS DP Modules | 7KM9300-0AB01-0AA0 | 11,850 |
| RS485 Modules | 7KM9300-0AM00-0AA0 | 7,890 |
| 4DI / 2DO expansion | 7KM9200-0AB00-0AA0 | 10,530 |
| I(N), I(Diff), analog expansion | 7KM9200-0AD00-0AA0 | 14,470 |
| Ethernet PROFINET Modules | 7KM9300-0AE02-0AA0 | 19,730 |

SIEMENS



# SIRIUS
# modular system

Take advantage of a universal system for every size
that also features 50,000 tested device combinations.

# 3RT2/1 SIRIUS 3RT2 Contactor

## Product Overview

อุปกรณ์ที่ออกแบบครบครันสำหรับการสวิตช์ชิ่ง การสตาร์ท และการป้องกัน รองรับการควบคุมมอเตอร์ทุกรูปแบบในระบบอุตสาหกรรม ทำให้การออกแบบตู้คอนโทรลมอเตอร์เป็นเรื่องง่าย รวดเร็ว ยืดหยุ่น และประหยัดพื้นที่ ตอบโจทย์ทุกความต้องการด้วยโซลูชันที่ชาญฉลาดและมีประสิทธิภาพสูง





# Standard

- IEC 60947-1, EN 60947-1
- IEC 60947-4-1, EN 60947-4-1
- IEC 60947-5-1, EN 60947-5-1

# Power Range

Contactors for switching motors:

- Size S00: 3RT201 up to 7.5kW
- Size S0: 3RT202 up to 18.5kW
- Size S2: 3RT203 up to 37kW
- Size S3: 3RT203 up to 55kW
- Size S6 to S12: 3RT10 up to 250kW

# 3RT2/1 SIRIUS 3RT2 Contactor

## High-Features Application Contactors
## 3-pole, 3...250kW AC Coil





| Rated data AC-2 and AC-3 Operational current Ie up to 400 V A | Rating of introduction motros at 50 Hz and 400 V kW | AC-1 Operational current Ie up to 690 V A | Auxiliary contacts Ident. No. | Version NO | Version NC | Rated Control Supply voltage Us at 50/60 Hz VAC | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|---|
| **Size S00** | | | | | | | | |
| 7 | 3 | 18 | 10<br>01 | 1<br>- | -<br>1 | 230<br>230 | 3RT2015-1AP01<br>3RT2015-1AP02 | 1,595<br>1,595 |
| 9 | 4 | 22 | 10<br>01 | 1<br>- | -<br>1 | 230<br>230 | 3RT2016-1AP01<br>3RT2016-1AP02 | 1,706<br>1,706 |
| 12 | 5.5 | 22 | 10<br>01 | 1<br>- | -<br>1 | 230<br>230 | 3RT2017-1AP01<br>3RT2017-1AP02 | 2,102<br>2,102 |
| 16 | 7.5 | 22 | 10<br>01 | 1<br>- | -<br>1 | 230<br>230 | 3RT2018-1AP01<br>3RT2018-1AP02 | 2,669<br>2,669 |
| **Size S0** | | | | | | | | |
| 25 | 11 | 40 | 11 | 1 | 1 | 230 | 3RT2026-1AP00 | 3,961 |
| 32 | 15 | 40 | 11 | 1 | 1 | 230 | 3RT2027-1AP00 | 5,674 |
| 38 | 18.5 | 40 | 11 | 1 | 1 | 230 | 3RT2028-1AP00 | 6,317 |

**Remarks**

Selection of Coil Voltage
3RT1045 - 1AXX-1/2

coil voltage 1 = 1N0
2 = 1NC

**Rated control supply voltages (the 10th and 11th position of the order number must be changed)**

| Contactor<br>Rated control supply Voltage Us | 3RT20 1 | 3RT20 2 |
|---|---|---|
| **Magnetic coils for 50 and 60 Hz** | | |
| **24 V AC** | **B0** | **C2** |
| **42 V AC** | **D0** | **D2** |
| **48 V AC** | **H0** | **H2** |
| **110 V AC** | **F0** | **G2** |
| **220 V AC** | **N2** | **N2** |
| **230 V AC** | **P0** | **L2** |

**Note: For further voltages, contact a sales representative.**

# 3RT2/1 SIRIUS 3RT2 Contactor

## High-Features Application Contactors
## 3-pole, 3...250kW AC Coil





| Rated data AC-2 and AC-3 Operational current Ie up to 400 V A | Rating of introduction motros at 50 Hz and 400 V kW | AC-1 Operational current Ie up to 690 V A | Auxiliary contacts Ident. No. | Version NO | Version NC | Rated Control Supply voltage Us at 50/60 Hz VAC | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|---|
| **Size S2** | | | | | | | | |
| 50 | 22 | 70 | 11 | 1 | 1 | 230 | 3RT2036-1AP00 | 8,494 |
| 65 | 30 | 80 | 11 | 1 | 1 | 230 | 3RT2037-1AP00 | 11,956 |
| 80 | 37 | 90 | 11 | 1 | 1 | 230 | 3RT2038-1AP00 | 13,312 |
| **Size S3** | | | | | | | | |
| 95 | 45 | 130 | 11 | 1 | 1 | 230 | 3RT2046-1AP00 | 17,952 |
| 110 | 55 | 130 | 11 | 1 | 1 | 230 | 3RT2047-1AP00 | 20,807 |

**Remarks**

Selection of Coil Voltage
3RT1045 - 1AXX-1/2

coil voltage 1 = 1N0
2 = 1NC

**Rated control supply voltages (the 10th and 11th position of the order number must be changed)**

| Contactor<br>Rated control supply Voltage Us | 3RT20 1 |
|---|---|
| **Magnetic coils for 50 and 60 Hz** | |
| 24 V AC | C2 |
| 42 V AC | D2 |
| 48 V AC | H2 |
| 110 V AC | G2 |
| 220 V AC | N2 |
| 230 V AC | L2 |

**Note: For further voltages, contact a sales representative.**

# 3RT2/1 SIRIUS 3RT2 Contactor

## High-Features Application Contactors
## 3-pole, 3...250kW DC Coil





| Rated data AC-2 and AC-3 Operational current Ie up to 400 V A | Rating of introduction motros at 50 Hz and 400 V kW | AC-1 Operational current Ie up to 690 V A | Auxiliary contacts Ident. No. | Version NO | Version NC | Rated Control Supply voltage Us at 50/60 Hz VDC | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|---|
| **Size S00** | | | | | | | | |
| 7 | 3 | 18 | 10<br>01 | 1<br>- | -<br>1 | 24<br>24 | 3RT2015-1BB41<br>3RT2015-1BB42 | 1,989<br>1,989 |
| 9 | 4 | 22 | 10<br>01 | 1<br>- | -<br>1 | 24<br>24 | 3RT2016-1BB41<br>3RT2016-1BB42 | 2,120<br>2,120 |
| 12 | 5.5 | 22 | 10<br>01 | 1<br>- | -<br>1 | 24<br>24 | 3RT2017-1BB41<br>3RT2017-1BB42 | 2,580<br>2,580 |
| 16 | 7.5 | 22 | 10<br>01 | 1<br>- | -<br>1 | 24<br>24 | 3RT2018-1BB41<br>3RT2018-1BB42 | 4,559<br>4,559 |
| **Size S0** | | | | | | | | |
| 25 | 11 | 40 | 11 | 1 | 1 | 24 | 3RT2026-1BB40 | 6,643 |
| 32 | 15 | 40 | 11 | 1 | 1 | 24 | 3RT2027-1BB40 | 9,081 |
| 38 | 18.5 | 40 | 11 | 1 | 1 | 24 | 3RT2028-1BB40 | 9,879 |

**Remarks**

Selection of Coil Voltage
3RT1045 - 1AXX-1/2

coil voltage 1 = 1N0
2 = 1NC

**Rated control supply voltages (the 10th and 11th position of the order number must be changed)**

| Contactor<br>Rated control supply Voltage Us | 3RT20 1 | 3RT20 2 |
|---|---|---|
| **Magnetic coils for 50 and 60 Hz** | | |
| **12 V AC** | **A4** | **--** |
| **24 V AC** | **B4** | **B4** |
| **42 V AC** | **D4** | **D4** |
| **48 V AC** | **W4** | **W4** |
| **60 V AC** | **E4** | **E4** |
| **110 V AC** | **F4** | **F4** |
| **125 V AC** | **G4** | **G4** |
| **220 V AC** | **M4** | **M4** |
| **230 V AC** | **P4** | **P4** |

**Note: For further voltages, contact a sales representative.**

# 3RT2/1 SIRIUS 3RT2 Contactor

## High-Features Application Contactors
## 3-pole, 3...250kW DC Coil





| Rated data AC-2 and AC-3 Operational current Ie up to 400 V A | Rating of introduction motros at 50 Hz and 400 V kW | AC-1 Operational current Ie up to 690 V A | Auxiliary contacts Ident. No. | Version NO | Version NC | Rated Control Supply voltage Us at 50/60 Hz VDC | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|---|
| **Size S2** | | | | | | | | |
| 50 | 22 | 70 | 11 | 1 | 1 | 24 | 3RT2036-1KB40 | 14,087 |
| 65 | 30 | 80 | 11 | 1 | 1 | 24 | 3RT2037-1KB40 | 19,246 |
| 80 | 37 | 90 | 11 | 1 | 1 | 24 | 3RT2038-1KB40 | 20,232 |
| **Size S3** | | | | | | | | |
| 95 | 45 | 130 | 11 | 1 | 1 | 24 | 3RT2046-1KB40 | 24,889 |

**Remarks**

Selection of Coil Voltage
3RT1045 - 1AXX-1/2

coil voltage 1 = 1N0
2 = 1NC

**Rated control supply voltages (the 10th and 11th position of the order number must be changed)**

| Contactor Rated control supply Voltage Us | 3RT20 3, 3RT20 4 |
|---|---|
| **Magnetic coils for 50 and 60 Hz** | |
| 12 V AC | - |
| 24 V AC | B4 |
| 42 V AC | D4 |
| 48 V AC | W4 |
| 60 V AC | E4 |
| 110 V AC | F4 |
| 125 V AC | G4 |
| 220 V AC | M4 |
| 230 V AC | P4 |

**Note: For further voltages, contact a sales representative.**

# 3RT2/1 SIRIUS 3RT2 Contactor

## High-Features Application Contactors
## 3-pole, 3...250kW AC/DC Coil







3

| Rated data AC-2 and AC-3 Operational current Ie up to 400 V A | Rating of introduction motros at 50 Hz and 400 V kW | AC-1 Operational current Ie up to 690 V A | Auxiliary contacts Ident. No. | Version NO | Version NC | Rated Control Supply voltage Us at 50/60 Hz VAC | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|---|
| **Size S0** | | | | | | | | |
| 12 | 5.5 | 40 | 11 | 1 | 1 | 200....280 | 3RT2024-1NP30 | 5,068 |
| 17 | 7.5 | 40 | 11 | 1 | 1 | 200....280 | 3RT2025-1NP30 | 6,103 |
| 25 | 11 | 40 | 11 | 1 | 1 | 200....280 | 3RT2026-1NP30 | 7,245 |
| 32 | 15 | 50 | 11 | 1 | 1 | 200....280 | 3RT2027-1NP30 | 9,957 |
| 38 | 18.5 | 50 | 11 | 1 | 1 | 200....280 | 3RT2028-1NP30 | 10,850 |
| **Size S2** | | | | | | | | |
| 50 | 22 | 70 | 11 | 1 | 1 | 175...280 | 3RT2036-1NP30 | 13,205 |
| 65 | 30 | 80 | 11 | 1 | 1 | 175...280 | 3RT2037-1NP30 | 18,059 |
| 80 | 37 | 90 | 11 | 1 | 1 | 175...280 | 3RT2038-1NP30 | 19,023 |
| **Size S2** | | | | | | | | |
| 95 | 45 | 130 | 11 | 1 | 1 | 175...280 | 3RT2046-1NP30 | 23,377 |
| 110 | 55 | 130 | 11 | 1 | 1 | 175...280 | 3RT2047-1NP30 | 24,234 |

**Remarks**

Selection of Coil Voltage
3RT1045 - 1AXX-1/2

coil voltage 1 = 1N0
2 = 1NC

**Rated control supply voltages (the 10th and 11th position of the order number must be changed)**

| Us min ..... Us max | 3RT20 2 |
|---|---|
| 21..28 V AC/DC | B3 |
| 95..130 V AC/DC | F3 |
| 200..280 V AC/DC | P3 |

| Us min ..... Us max | 3RT20 3, 3RT20 4 |
|---|---|
| 20.33 V AC/DC | B3 |
| 48..80 V AC/DC | 33 |
| 83..155 V AC/DC | F3 |
| 175..280 V AC/DC | P3 |

**Note: For further voltages, contact a sales representative.**

# 3RT2/1 SIRIUS 3RT2 Contactor

## High-Features Application Contactors
## 3-pole, 3...250kW AC/DC Coil



3

| Rated data AC-2 and AC-3 Operational current Ie up to 400 V A | Rating of introduction motros at 50 Hz and 400 V kW | AC-1 Operational current Ie up to 690 V A | Auxiliary contacts Ident. No. | Version NO | Version NC | Rated Control Supply voltage Us at 50/60 Hz VAC | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|---|
| **Size S6** | | | | | | | | |
| 115 | 55 | 160 | | 2<br>2 | 2<br>2 | 110 ... 127<br>220 ... 240 | 3RT1054-6AF36<br>3RT1054-6AP36 | 24,448<br>24,448 |
| 150 | 75 | 185 | | 2<br>2 | 2<br>2 | 110 ... 127<br>220 ... 240 | 3RT1055-6AF36<br>3RT1055-6AP36 | 29,837<br>29,837 |
| 185 | 90 | 215 | | 2<br>2 | 2<br>2 | 110 ... 127<br>220 ... 240 | 3RT1056-6AF36<br>3RT1056-6AP36 | 37,832<br>37,832 |
| **Size 10** | | | | | | | | |
| 225 | 110 | 275 | | 2<br>2 | 2<br>2 | 110 ... 127<br>220 ... 240 | 3RT1064-6AF36<br>3RT1064-6AP36 | 42,472<br>42,472 |
| 265 | 132 | 330 | | 2<br>2 | 2<br>2 | 110 ... 127<br>220 ... 240 | 3RT1065-6AF36<br>3RT1065-6AP36 | 59,960<br>59,960 |
| 300 | 160 | 330 | | 2<br>2 | 2<br>2 | 110 ... 127<br>220 ... 240 | 3RT1066-6AF36<br>3RT1066-6AP36 | 72,095<br>72,095 |
| **Size 10** | | | | | | | | |
| 400 | 200 | 430 | | 2<br>2 | 2<br>2 | 110 ... 127<br>220 ... 240 | 3RT1075-6AF36<br>3RT1075-6AP36 | 90,297<br>90,297 |
| 500 | 250 | 610 | | 2<br>2 | 2<br>2 | 110 ... 127<br>220 ... 240 | 3RT1076-6AF36<br>3RT1076-6AP36 | 130,271<br>130,271 |

**Voltage Table**

| Us min ..... Us max | 3RT10 5, 3RT10 6, 3RT10 7 |
|---|---|
| AC/DC 23...26V | B3 |
| AC/DC 42...48V | D3 |
| AC/DC 110...127V | F3 |
| AC/DC 200...220V | M3 |
| AC/DC 220...240V | P3 |
| AC/DC 240...277V | U3 |
| AC/DC 380...420V | V3 |
| AC/DC 440...480V | R3 |
| AC/DC 500...550V | S3 |
| AC/DC 575...600V | T3 |

**Note: For further voltages, contact a sales representative.**

## Accessories



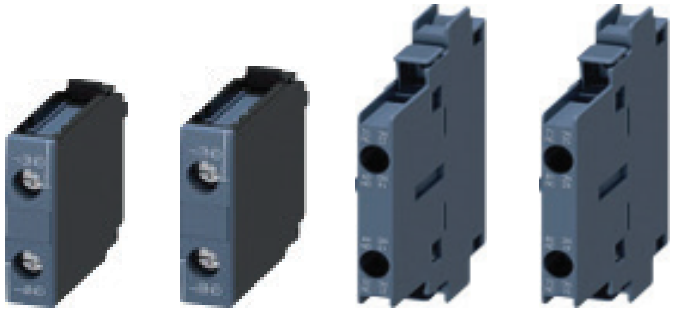




| For Contactors | Auxiliary contact Version | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| **Auxiliary switch blocks for snapping onto the front according to EN50012 (also compliant with the requirements according to EN 50005)** | | | |
| **Size S00 to S3, F or assembling contactors with 2, 3, 4 or 5 auxiliary contacts** | | | |
| 3RT20 1<br>3RT20 2<br>3RT20 3<br>3RT20 4<br>3RH21<br>3RH24 | -- 1 | 3RH2911-1HA01 | 550 |
| | -- 2 | 3RH2911-1HA02 | 700 |
| | -- 3 | 3RH2911-1HA03 | 940 |
| | 1 -- | 3RH2911-1HA10 | 550 |
| | 1 1 | 3RH2911-1HA11 | 700 |
| | 1 2 | 3RH2911-1HA12 | 940 |
| | 1 3 | 3RH2911-1HA13 | 1,150 |
| | 2 -- | 3RH2911-1HA20 | 700 |
| | 2 1 | 3RH2911-1HA21 | 940 |
| | 2 2 | 3RH2911-1HA22 | 1,150 |
| | 3 -- | 3RH2911-1HA30 | 940 |
| | 3 1 | 3RH2911-1HA31 | 1,150 |
| **Auxiliary switch blocks for snapping onto the front according to EN5005**<br>**Size S00 to S3**<br>2 or 4-pole auxiliary switch blocks for assembling contactors with 3, 5 or 6 auxiliary contacts | | | |
| 3RT2.1,<br>3RT2. 2..<br>3RT2. 3..<br>3RT2. 4..<br>3RH21, 3RH24 | 4 -- -- -- | 3RH2911-1FA40 | 1,150 |
| | 2 2 -- -- | 3RH2911-1FA22 | 1,150 |
| | -- 4 -- -- | 3RH2911-1FA04 | 1,150 |
| | -- -- 1 1 | 3RH2911-1FB11 | 906 |
| | 1 1 1 1 | 3RH2911-1FB22 | 1,356 |
| | -- -- 2 2 | 3RH2911-1FC22 | 1,213 |
| **Snap-on auxiliary switch blocks according to EN50011**<br>For assembling contactors with 2, 3, 4 or 5 auxiliary contacts | | | |
| For 3RH21 40<br>For 3RH24 40 | 4 -- | 3RH2911-1GA40 | 760 |
| | 3 1 | 3RH2911-1GA31 | 760 |
| | 2 2 | 3RH2911-1GA22 | 760 |
| | 1 3 | 3RH2911-1GA13 | 760 |
| | -- 4 | 3RH2911-1GA04 | 760 |
| **Laterally mounted auxiliary switch blocks according to EN5005 on the right and/or on the left**<br>**Size S00 to S3** | | | |
| 3RT20 1<br>3RT20 2<br>3RT20 3<br>3RT20 4 | -- 2 | 3RH2911-1DA02 | 1,040 |
| | 1 1 | 3RH2911-1DA11 | 1,040 |
| | 2 -- | 3RH2911-1DA20 | 1,040 |
| | -- 2 | 3RH2921-1DA02 | 1,040 |
| | 1 1 | 3RH2921-1DA11 | 1,040 |
| | 2 -- | 3RH2921-1DA20 | 1,040 |

## Accessories





| For Contactors | Auxiliary contact Version<br>Ident. No.<br>NO NC NO NC | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
| **Auxiliary switch blocks for snapping onto the front according to EN50012**<br>**Size S6 to S12,** | | | |
| | **4-pole auxiliary switch blocks** | | |
| 3RT1..5...<br>3RT1..7 | 22 2 2 -- -- | 3RH1921-1XA22-0MA0 | 842 |
| | **1-pole auxiliary switch blocks** | | |
| | 10 1 - -- -- | 3RH1921-1CA10 | 245 |
| | 01 - 1 -- -- | 3RH1921-1CA01 | 245 |
| | 10 - - 1 -- | 3RH1921-1CD10 | 414 |
| | 01 - - -- 1 | 3RH1921-1CA01 | 245 |
| **Laterally mounted auxiliary switch blocks according to EN50012**<br>**Size S6 to S12,** | | | |
| | **First laterally mountable auxiliary switch block (right or left), 2-pole** | | |
| 3RT1..5,...<br>3RT1..7, | 1 1 | 3RH1921-1DA11 | 980 |
| | **Second laterally mountable auxiliary switch block (right or left), 2-pole** | | |
| | 1 1 | 3RH1921-1JA11 | 980 |
| **Laterally mounted auxiliary switch blocks according to EN50005**<br>**Size S6 to S12,** | | | |
| | **First laterally mountable auxiliary switch block (right or left), 2-pole** | | |
| 3RT1..5,...<br>3RT1..7, | 2 - | 3RH1921-1EA20 | 980 |
| | 1 1 | 3RH1921-1EA11 | 980 |
| | - 2 | 3RH1921-1EA02 | 980 |
| | **Second laterally mountable auxiliary switch block (right or left), 2-pole** | | |
| | 2 - | 3RH1921-1KA20 | 642 |
| | 1 1 | 3RH1921-1KA11 | 642 |
| | - 2 | 3RH1921-1KA02 | 642 |

# 3RT2/1 SIRIUS 3RT2 Contactor

## Accessories



| For Contactor<br>Type | Version | Rated control supply voltage Us AC operation<br>V | | Power consumption P of the LED at Us<br>mW | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|
| **Surge suppressors with LED (also for spring-type terminals)** | | | | | | |
|  **Size S00**<br>For plugging onto the front side of the contactors with and without auxiliary switch block | | | | | | |
| 3RT2.1,<br>3RH2. | Varistors | 24...48<br>48...127<br>127...240 | 12...24<br>24...70<br>70...150<br>150...250 | 10...120<br>20...470<br>50...700<br>160...950 | 3RT2916-1JJ00<br>3RT2916-1JK00<br>3RT2916-1JL00<br>3RT2916-1JP00 | 599<br>599<br>599<br>599 |
| 3RT2.1<br>3RH2 | Noise suppression diodes | | 24...70<br>50...150<br>150...250 | 20...470<br>50...700<br>160...950 | 3RT2916-1LM00<br>3RT2916-1LN00<br>3RT2916-1LP00 | 599<br>599<br>599 |
|  **Size S0**<br>For plugging onto the front side of the contactors (prior to mounting of the auxiliary switch block) | | | | | | |
| 3RH2.2 | Varistors | 24...48<br>48...127<br>127...240 | 12...24<br>24...70<br>70...150 | 10...120<br>20...470<br>50...700 | 3RT2926-1JJ00<br>3RT2926-1JK00<br>3RT2926-1JL00 | 717<br>717<br>717 |
| **Size S2 and S3**<br>For plugging onto the front side of the contactors (prior to mounting of the auxiliary switch block) | | | | | | |
| 3RT2.3<br>3RH2.4 | Varistors | 24...48<br>48...127<br>127...240 | 12...24<br>24...70<br>70...150 | 10...120<br>20...470<br>50...700 | 3RT2936-1JJ00<br>3RT2936-1JK00<br>3RT2936-1JL00 | 710<br>724<br>738 |

# 3RT2/1 SIRIUS 3RT2 Contactor

## Accessories

| For Contactor Type | Version | Rated control supply voltage Us AC operation V | AC operation V | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|
| **Surge suppressors with LED (also for spring-type terminals)** | | | | | |
|  **Size S00** For plugging onto the front side of the contactors with and without auxiliary switch block | | | | | |
| 3RT2.1, 3RH2. | Varistors | 24...48<br>48...127<br>127...240<br>240...400<br>400...600 | 24...70<br>70...150<br>150...250<br>--<br>-- | 3RT2916-1BB00<br>3RT2916-1BC00<br>3RT2916-1BD00<br>3RT2916-1BE00<br>3RT2916-1BF00 | 453<br>453<br>453<br>453<br>453 |
| 3RT2.1, 3RH2. | RC Elements | 24...48<br>48...127<br>127...240<br>240...400<br>400...600 | 24...70<br>70...150<br>150...250<br>--<br>-- | 3RT2916-1CB00<br>3RT2916-1CC00<br>3RT2916-1CD00<br>3RT2916-1CE00<br>3RT2916-1CF00 | 453<br>453<br>453<br>453<br>453 |
| 3RT2.1, 3RH2. | Noise suppression diodes | | 12...250 | 3RT2916-1DG00 | 453 |
|  **Size S0** For plugging onto the front side of the contactors with and without auxiliary switch block | | | | | |
| 3RT2.2 | Varistors | 24...48<br>48...127<br>127...240<br>240...400<br>400...600 | 24...70<br>70...150<br>150...250<br>--<br>-- | 3RT2926-1BB00<br>3RT2926-1BC00<br>3RT2926-1BD00<br>3RT2926-1BE00<br>3RT2926-1BF00 | 553<br>553<br>553<br>553<br>553 |
| 3RT2.2 | RC Elements | 24...48<br>48...127<br>127...240<br>240...400<br>400...600 | 24...70<br>70...150<br>150...250<br>--<br>-- | 3RT2926-1CB00<br>3RT2926-1CC00<br>3RT2926-1CD00<br>3RT2926-1CE00<br>3RT2926-1CF00 | 699<br>699<br>699<br>699<br>699 |
|  **Size S2 and S3** For plugging onto the front side of the contactors with and without auxiliary switch block | | | | | |
| 3RT2.3, 3RT2.4, | Varistors | 24...48<br>48...127<br>127...240<br>240...400<br>400...600 | --<br>--<br>--<br>--<br>-- | 3RT2936-1BB00<br>3RT2936-1BC00<br>3RT2936-1BD00<br>3RT2936-1BE00<br>3RT2936-1BF00 | 556<br>581<br>599<br>763<br>785 |
| 3RT2.3, | RC Elements | 24...48<br>48...127<br>127...240<br>240...400<br>400...600 | 24...70<br>70...150<br>150...250<br>--<br>-- | 3RT2936-1CB00<br>3RT2936-1CC00<br>3RT2936-1CD00<br>3RT2936-1CE00<br>3RT2936-1CF00 | 713<br>902<br>778<br>942<br>942 |
|  **Size S6 to S12** For connecting to withdrawable coil for contactors | | | | | |
| 3RT1.5 3RT1.7 | RC Elements | 24...48<br>48...127<br>127...240<br>240...400<br>400...600 | 24...70<br>70...150<br>150...250<br>--<br>-- | 3RT1956-1CB00<br>3RT1956-1CC00<br>3RT1956-1CD00<br>3RT1956-1CE00<br>3RT1956-1CF00 | 1,670<br>1,670<br>1,670<br>1,670<br>1,670 |

# SIRIUS 3RU2 Thermal Overload Relay

## Product Overview

ออกแบบมาเพื่อป้องกันอุปกรณ์ด้วยระบบหน่วงเวลาแบบผกผัน (Inverse-Time) ปกป้องโหลดที่มีการสตาร์ทปกติจากอุณหภูมิสูงเกินอันเนื่องมาจากโอเวอร์โหลดหรือเฟสขาด ผลิตตามแนวทางที่เป็นมิตรต่อสิ่งแวดล้อม ใช้วัสดุที่สามารถนำกลับมาใช้ใหม่ได้ ผ่านการรับรองมาตรฐานสากลที่สำคัญทั่วโลก มอบความมั่นใจในคุณภาพและความปลอดภัยระดับสูงสุด






# Standard

- IEC60947-4-1
- IEC60947-1

# IMPORTANT FEATURES

- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicators
- TEST function
- STOP button
- Screw or spring-type terminals
- Sealable covers (optional accessory)

# SIRIUS 3RU2 Thermal Overload Relay

## For Standard Application
## 3RU21 thermal overload relays for mounting onto contactor, CLASS 10









| Size Contactor | Rating for three-phase motor, rated<br>kW | Current setting value of the inversetime delayed overload release<br>A | Short-circuit protection with fuse, type of coordination "2" operational class gG | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|
| **Size S00** | | | | | |
| | 0.04<br>0.06<br>0.06<br>0.09 | 0.11....0.16<br>0.14....0.2<br>0.18....0.25<br>0.22....0.32 | 0.5<br>1<br>1<br>1.6 | 3RU2116-0AB0<br>3RU2116-0BB0<br>3RU2116-0CB0<br>3RU2116-0DB0 | 3,061<br>3,061<br>3,061<br>3,061 |
| | 0.09<br>0.12<br>0.18<br>0.18 | 0.28....0.4<br>0.35....0.5<br>0.45....0.63<br>0.55....0.8 | 2<br>2<br>2<br>4 | 3RU2116-0EB0<br>3RU2116-0FB0<br>3RU2116-0GB0<br>3RU2116-0HB0 | 3,061<br>3,061<br>3,061<br>3,061 |
| | 0.25<br>0.37<br>0.55<br>0.75 | 0.7....1<br>0.9....1.25<br>1.1....1.6<br>1.4....2 | 4<br>4<br>6<br>6 | 3RU2116-0JB0<br>3RU2116-0KB0<br>3RU2116-1AB0<br>3RU2116-1BB0 | 3,061<br>3,061<br>3,061<br>3,061 |
| | 0.75<br>1.1<br>1.5<br>1.5 | 1.8....2.5<br>2.2....3.2<br>2.8....4<br>3.5....5 | 10<br>10<br>16<br>20 | 3RU2116-1CB0<br>3RU2116-1DB0<br>3RU2116-1EB0<br>3RU2116-1FB0 | 3,061<br>3,061<br>3,061<br>3,061 |
| | 2.2<br>3<br>4<br>5.5<br>7.5 | 4.5....6.3<br>5.5....8<br>7....10<br>9....12.5<br>11....16 | 20<br>25<br>35<br>35<br>40 | 3RU2116-1GB0<br>3RU2116-1HB0<br>3RU2116-1JB0<br>3RU2116-1KB0<br>3RU2116-4AB0 | 3,061<br>3,061<br>3,061<br>3,061<br>3,061 |
| **Size S0** | | | | | |
| | 7.5<br>11<br>11 | 14....20<br>17....22<br>20....25 | 50<br>63<br>63 | 3RU2126-4BB0<br>3RU2126-4CB0<br>3RU2126-4DB0 | 3,287<br>3,287<br>3,287 |
| | 15<br>15<br>18.5<br>18.5 | 23....28<br>27...32<br>30...26<br>34...40 | 63<br>80<br>80<br>80 | 3RU2126-4NB0<br>3RU2126-4EB0<br>3RU2126-4PB0<br>3RU2126-4FB0 | 5,035<br>5,035<br>5,035<br>5,035 |

# SIRIUS 3RU2 Thermal Overload Relay

## For Standard Application
## 3RU21 thermal overload relays for mounting onto contactor, CLASS 10





| Size Contactor | Rating for three-phase motor, rated<br>kW | Current setting value of the inversetime delayed overload release<br>A | Short-circuit protection with fuse, type of coordination "2" operational class gG | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|
| **Size S2** | | | | | |
| | 18.5 | 28 .... 40 | 80 | 3RU2136-4FB0 | 5,551 |
| | 22 | 36 .... 45 | 100 | 3RU2136-4GB0 | 6,463 |
| | 22 | 40 ... 50 | 100 | 3RU2136-4HB0 | 7,692 |
| | 30 | 47 ... 57 | 100 | 3RU2136-4QB0 | 7,692 |
| | 30 | 54 ... 65 | 125 | 3RU2136-4JB0 | 7,692 |
| | 37 | 62 ... 73 | 160 | 3RU2136-4KB0 | 7,692 |
| | 37 | 70 ... 80 | 160 | 3RU2136-4RB0 | 8,842 |
| **Size S2** | | | | | |
| | 45 | 70 ... 90 | 160 | 3RU2146-4LB0 | 8,882 |
| | 45 | 80 ... 100 | 120 | 3RU2146-4MB0 | 11,419 |

# Protection equipment

## SIRIUS 3RB electronic overload relays IE3 ready IE4 ready IE3/IE4 ready



3RB2056-1FW2



3RB2066-1MF2

| Size contactor | Rated power for three-phase motors, rated value[1] | Current setting value of the inverse-time delayed overload release | Short-circuit protection with fuse, type of coordination "2", operational class gG[2] | Screw terminals (on auxiliary current side) | | Spring-loaded terminals (on auxiliary current side) | |
|---|---|---|---|---|---|---|---|
| | kW | A | A | รุ่นสินค้า | ราคา/หน่วย (บาท) | รุ่นสินค้า | ราคา/หน่วย (บาท) |
| **Size S6** | | | | | | | |
| **Devices with busbar connection, for mounting on contactors and stand-alone installation** | | | | | | | |
| S6 | 30 ... 90 | 50 ... 200 | 315 | 3RB2056-1FC2 | 18,857 | 3RB2056-1FF2 | 18,857 |
| **Devices with straight-through transformer, for mounting on contactors and stand-alone installationt** | | | | | | | |
| For mounting on S6 contactors with box terminals | 30 ... 90 | 50 ... 200 | 315 | 3RB2056-1FW2 | 18,202 | 3RB2056-1FX2 | 18,202 |
| **Size S10/S12** | | | | | | | |
| **Devices with busbar connection, for mounting on contactors and stand-alone installation** | | | | | | | |
| S10/S12 and size 14 (3TF68/ 3TF69)[3] | 30 ... 132<br>90 ... 355 | 55 ... 250<br>160 ... 630 | 400<br>800 | 3RB2066-1GC2<br>3RB2066-1MC2 | 20,420<br>35,446 | 3RB2066-1GF2<br>3RB2066-1MF2 | 20,420<br>35,446 |

[1] Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

[2] Maximum protection by fuse only for overload relays, type of coordination "2". For fuse values in connection with contactors, see
- Digital Configuration Manual for load feeders,
- Configuration Manual for load feeders.

[3] For 3TF68/3TF69 contactors, direct mounting is not possible.

# 3RU2/1 Thermal Overload Relays

## For Standard Application Accessories



| | Version | Size | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|
| **Terminal brackets for stand-alone installation**<br><br>3RU2916-3AA01<br><br>3RU2926-3AA01 | For separate mounting of the<br>overload relays; screw and snap-on<br>mounting onto TH35 standard mounting rail | S00<br>S0<br>S2<br>S3 | 3RU2916-3AA01<br>3RU2926-3AA01<br>3RU2936-3AA01<br>3RU2946-3AA01 | 614<br>741<br>1,003<br>1,300 |
| **Terminal brackets for stand-alone installation**<br><br>3RU2900-1A<br>with pushbutton and<br>extension plunger | Resetting pluggers, holders and formers<br>Pushbuttons with extended stroke<br>(12mm), IP65, Ø 22 mm<br>Extension plungers<br>For distance between the pushbutton and the | S00... S3<br>S00... S3<br><br>S00... S3 | 3RU2900-1A<br>3SU1200-0FB10-0AA0<br><br>3SU1900-0KG10-0AA0 | 257<br>1,506<br><br>177 |
| **Cable releases with holder for RESET**<br> | For Ø 6.5 mm hole in the control panel;<br>max. control panel thickness 8 mm<br>• Length 400 mm<br>• Length 600 mm | S00... S3<br>S00... S3 | 3RU2900-1B<br>3RU2900-1C | 2,525<br>2,525 |
| **Modules for remote RESET, electrical**<br> | Operating range 0.85 ... 1.1 x Us,<br>power consumption AC 80 VA,<br>DC 70 W, ON period 0.2 ... 4 s,<br>switching frequency 60/h<br>• 24 ... 30 V AC/DC<br>• 110 ... 127 V AC/DC<br>• 220 ... 250 V AC/DC | S00... S3<br>S00... S3<br>S00... S3 | 3RU1900-2AB71<br>3RU1900-2AF71<br>3RU1900-2AM71 | 4,599<br>4,599<br>4,599 |

# SIRIUS 3RV2 Motor Starter Protector / Circuit Breaker

## Product Overview

อุปกรณ์ป้องกัน และตัดวงจรมอเตอร์แบบกะทัดรัด พร้อมคุณสมบัติจำกัดกระแส ออกแบบมาโดยเฉพาะสำหรับระบบโหลดฟีดเดอร์เพื่อเพิ่มประสิทธิภาพ และความปลอดภัยสูงสุดเหมาะสำหรับการสวิตช์และป้องกันมอเตอร์สามเฟสกำลังสูงสุด 55/45 kW ที่ 400 V AC พร้อมรองรับการใช้งานกับโหลดอื่นๆ ที่มีกระแสพิกัดสูงสุดถึง 100 A





## Description

The 3RV2 motor starter protectors are available in four sizes:

- Size S00 - width 45 mm, max. rate current 16A at 400 VAC suitable for three-phase motors up to 7.5kW
- Size S0 - width 45 mm, max. rate current 40A at 400 VAC suitable for three-phase motors up to 18.5kW
- Size S2 - width 55 mm, max. rate current 80A at 400 VAC suitable for three-phase motors up to 37kW
- Size S3 - width 70 mm, max. rate current 100A at 400 VAC suitable for three-phase motors up to 45/55kW

3RV2 motor starter protectors can be supplied with screw terminals and spring-type terminals.

## Standard

- IEC 60947-1, EN 60947-1
- IEC 60947-4-1, EN 60947-4-1
- IEC 60947-5-1, EN 60947-5-1

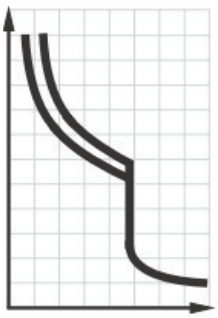
## Power Range

Contactors for switching motors:

- Size S00: 3RT201 up to 7.5kW
- Size S0: 3RT202 up to 18.5kW
- Size S2: 3RT203 up to 37kW
- Size S3: 3RT203 up to 55kW
- Size S6 to S12: 3RT10 up to 250kW

# SIRIUS 3RV2 Motor Starter Protector / Circuit Breaker

## 3RV2 Motor Starter Protectors, Class 10, without auxiliary switches For motor protection

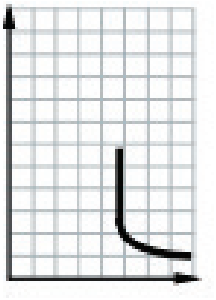




| Size | Rated current<br>A | Suitable for 3 Phase induction motors with P<br>kW | Setting Range for thermal overload Release<br>A | Instantaneous overcurrent release<br>A | Short circuit breaking capacity at 400 V AC<br>kA | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|
| **Size S00** | | | | | | | |
|  | 0.16 | 0.04 | 0.11...0.16 | 2.1 | 100 | 3RV2011-0AA10 | 3,373 |
| | 0.2 | 0.06 | 0.14...0.20 | 2.6 | 100 | 3RV2011-0BA10 | 3,373 |
| | 0.25 | 0.06 | 0.18...0.25 | 3.3 | 100 | 3RV2011-0CA10 | 3,373 |
| | 0.32 | 0.09 | 0.22...0.32 | 4.2 | 100 | 3RV2011-0DA10 | 3,402 |
| | 0.4 | 0.09 | 0.28...0.40 | 5.2 | 100 | 3RV2011-0EA10 | 3,402 |
| | 0.5 | 0.12 | 0.35...0.50 | 6.5 | 100 | 3RV2011-0FA10 | 3,402 |
| | 0.63 | 0.18 | 0.45...0.63 | 8.2 | 100 | 3RV2011-0GA10 | 3,431 |
| | 0.8 | 0.18 | 0.55...0.80 | 10 | 100 | 3RV2011-0HA10 | 3,654 |
| | 1 | 0.25 | 0.7...1 | 13 | 100 | 3RV2011-0JA10 | 3,654 |
| | 1.25 | 0.37 | 0.9...1.25 | 16 | 100 | 3RV2011-0KA10 | 3,865 |
| | 1.6 | 0.55 | 1.1...1.6 | 21 | 100 | 3RV2011-1AA10 | 3,865 |
| | 2 | 0.75 | 1.4...2 | 26 | 100 | 3RV2011-1BA10 | 4,035 |
| | 2.5 | 0.75 | 1.8...2.5 | 33 | 100 | 3RV2011-1CA10 | 4,035 |
| | 3.2 | 1.1 | 2.2...3.2 | 42 | 100 | 3RV2011-1DA10 | 4,035 |
| | 4 | 1.5 | 2.8...4 | 52 | 100 | 3RV2011-1EA10 | 4,035 |
| | 5 | 1.5 | 3.5...5 | 65 | 100 | 3RV2011-1FA10 | 4,035 |
| | 6.3 | 2.2 | 4.5...6.3 | 82 | 100 | 3RV2011-1GA10 | 4,035 |
| | 8 | 3 | 5.5...8 | 104 | 100 | 3RV2011-1HA10 | 4,035 |
| | 10 | 4 | 7...10 | 130 | 100 | 3RV2011-1JA10 | 4,547 |
| | 12.5 | 5.5 | 9...12.5 | 163 | 100 | 3RV2011-1KA10 | 4,547 |
| | 16 | 7.5 | 10...16 | 208 | 55 | 3RV2011-4AA10 | 4,713 |
| **Size S0** | | | | | | | |
|  | 20 | 7.5 | 14...20 | 260 | 55 | 3RV2021-4BA10 | 4,919 |
| | 22 | 11 | 17...22 | 286 | 55 | 3RV2021-4CA10 | 5,209 |
| | 25 | 11 | 20...25 | 325 | 55 | 3RV2021-4DA10 | 5,953 |
| | 28 | 15 | 23...28 | 364 | 55 | 3RV2021-4NA10 | 7,524 |
| | 32 | 15 | 27...32 | 400 | 55 | 3RV2021-4EA10 | 7,524 |
| | 36 | 18.5 | 30...36 | 432 | 55 | 3RV2021-4PA10 | 9,054 |
| | 40 | 18.5 | 34....60 | 480 | 55 | 3RV2021-4FA10 | 9,839 |
| **Size S2** | | | | | | | |
|  | 45 | 22 | 35...45 | 650 | 65 | 3RV2031-4VA10 | 13,436 |
| | 52 | 22 | 42...52 | 741 | 65 | 3RV2031-4WA10 | 13,809 |
| | 59 | 30 | 49...59 | 845 | 65 | 3RV2031-4XA10 | 13,891 |
| | 65 | 30 | 54...65 | 845 | 65 | 3RV2031-4JA10 | 13,891 |
| | 73 | 37 | 62...73 | 949 | 65 | 3RV2031-4KA10 | 15,545 |
| | 80 | 37 | 70...80 | 1040 | 65 | 3RV2031-4RA10 | 16,661 |
| **Size S3** | | | | | | | |
|  | 84 | 45 | 65...84 | 1170 | 65 | 3RV2041-4RA10 | 17,612 |
| | 93 | 45 | 75...93 | 1300 | 65 | 3RV2041-4YA10 | 17,612 |
| | 100 | 45, 55 | 80...100 | 1300 | 65 | 3RV2041-4MA10 | 19,514 |

## 3RV2 Motor Starter Protectors, Class 10, without auxiliary switches For starter combinations

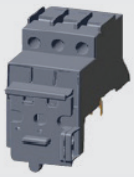




| Size | Rated current<br>A | Suitable for 3 Phase induction motors with P<br>kW | Setting Range for thermal overload Release<br>A | Instantaneous overcurrent release<br>A | Short circuit breaking capacity at 400 V AC<br>kA | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|
| **Size S00** | Class 10, without auxiliary switches | | | | | | |
|  | 0.16 | 0.04 | without | 2.1 | 100 | 3RV2311-0AC10 | 3,729 |
| | 0.2 | 0.06 | without | 2.6 | 100 | 3RV2311-0BC10 | 3,729 |
| | 0.25 | 0.06 | without | 3.3 | 100 | 3RV2311-0CC10 | 3,729 |
| | 0.32 | 0.09 | without | 4.2 | 100 | 3RV2311-0DC10 | 3,778 |
| | 0.4 | 0.09 | without | 5.2 | 100 | 3RV2311-0EC10 | 3,778 |
| | 0.5 | 0.12 | without | 6.5 | 100 | 3RV2311-0FC10 | 3,778 |
| | 0.63 | 0.18 | without | 8.2 | 100 | 3RV2311-0GC10 | 3,778 |
| | 0.8 | 0.18 | without | 10 | 100 | 3RV2311-0HC10 | 3,778 |
| | 1 | 0.25 | without | 13 | 100 | 3RV2311-0JC10 | 4,018 |
| | 1.25 | 0.37 | without | 16 | 100 | 3RV2311-0KC10 | 4,018 |
| | 1.6 | 0.55 | without | 21 | 100 | 3RV2311-1AC10 | 4,018 |
| | 2 | 0.75 | without | 26 | 100 | 3RV2311-1BC10 | 4,109 |
| | 2.5 | 0.75 | without | 33 | 100 | 3RV2311-1CC10 | 4,109 |
| | 3.2 | 1.1 | without | 42 | 100 | 3RV2311-1DC10 | 4,109 |
| | 4 | 1.5 | without | 52 | 100 | 3RV2311-1EC10 | 4,109 |
| | 5 | 1.5 | without | 65 | 100 | 3RV2311-1FC10 | 4,109 |
| | 6.3 | 2.2 | without | 82 | 100 | 3RV2311-1GC10 | 4,109 |
| | 8 | 3 | without | 104 | 100 | 3RV2311-1HC10 | 4,109 |
| | 10 | 4 | without | 130 | 100 | 3RV2311-1JC10 | 4,589 |
| | 12.5 | 5.5 | without | 163 | 100 | 3RV2311-1KC10 | 4,589 |
| | 16 | 7.5 | without | 208 | 55 | 3RV2311-4AC10 | 4,589 |
| **Size S0** | | | | | | | |
|  | 20 | 7.5 | without | 260 | 55 | 3RV2321-4BC10 | 4,795 |
| | 22 | 11 | without | 286 | 55 | 3RV2321-4CC10 | 5,002 |
| | 25 | 11 | without | 325 | 55 | 3RV2321-4DC10 | 5,705 |
| | 28 | 15 | without | 364 | 55 | 3RV2321-4NC10 | 7,317 |
| | 32 | 15 | without | 400 | 55 | 3RV2321-4EC10 | 7,317 |
| | 36 | 18.5 | without | 432 | 20 | 3RV2321-4PC10 | 8,723 |
| | 40 | 18.5 | without | 480 | 20 | 3RV2321-4FC10 | 9,633 |
| **Size S2** | | | | | | | |
|  | 45 | 22 | without | 650 | 65 | 3RV2331-4VC10 | 13,230 |
| | 52 | 22 | without | 741 | 65 | 3RV2331-4WC10 | 13,436 |
| | 59 | 30 | without | 845 | 65 | 3RV2331-4XC10 | 13,436 |
| | 65 | 30 | without | 845 | 65 | 3RV2331-4JC10 | 13,436 |
| | 73 | 37 | without | 949 | 65 | 3RV2331-4KC10 | 15,214 |
| | 80 | 37 | without | 1040 | 65 | 3RV2331-4RC10 | 16,248 |
| **Size S3** | | | | | | | |
|  | 84 | 45 | without | 1170 | 65 | 3RV2341-4RC10 | 16,951 |
| | 93 | 45 | without | 1300 | 65 | 3RV2341-4YC10 | 16,951 |
| | 100 | 45, 55 | without | 1300 | 65 | 3RV2341-4MC10 | 18,853 |

## Accessories



| | Version | Contact | For motor starter protectir/circuit breakers Size | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|
|  | **Transverse auxiliary switches** | 1 CO<br>1 NO + 1 NC<br>2 NO | S00...S3 | 3RV2901-1D<br>3RV2901-1E<br>3RV2901-1F | 550<br>670<br>670 |
|  | **Solid-state compatible transverse auxiliary switches** | 1 CO | S00...S3 | 3RV2901-1G | 2,060 |
|  | **Cover for transverse auxiliary switches** | S00...S3 | | 3RV2901-0H | 310 |
|  | **Lateral auxiliary switches** with screw terminals mountable on the left | 1NO + 1NC<br>2NO<br>2NC<br>2NO + 2NC | S00...S3 | 3RV2901-1A<br>3RV2901-1B<br>3RV2901-1C<br>3RV2901-1J | 670<br>670<br>670<br>1,500 |
|  | **Signaling Switches** One signal switch can be mounted on the left per motor starter protector Separated tripped and short-circuit alarms 1NO+ 1NC | 1NO + 1NC | S00...S3 | 3RV2921-1M | 1,290 |
|  | **Isolator Modules** Visible isolating distance for isolating individual motor starter protectors from the network, lockable in disconnected position | | S00, S0<br>S2 | 3RV2928-1A<br>3RV2938-1A | 2,750<br>4,610 |

## Accessories



| | Version | Contact | For motor starter protectir/circuit breakers Size | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|
|  | **Undervoltage trip units** | | | | |
| | Rated control supply voltage V AC 50 Hz | | | | |
| | 24 | | S00....S3 | 3RV2902-1AB0 | 2,010 |
| | 110 | | S00....S3 | 3RV2902-1AF0 | 2,010 |
| | 230 | | S00....S3 | 3RV2902-1AP0 | 2,010 |
| | 400 | | S00....S3 | 3RV2902-1AV0 | 2,010 |
| | 415 | | S00....S3 | 3RV2902-1AV1 | 2,010 |
| | 500 | | S00....S3 | 3RV2902-1AS0 | 2,010 |
| | Rated control supply voltage V DC | | | | |
| | 24 | | S00....S3 | 3RV2902-1AB4 | 5,820 |
|  | **Undervoltage trip units with leading auxiliary contacts 2NO** | | | | |
| | Rated control supply voltage V AC 50 Hz | | | | |
| | 24 | | S00....S3 | 3RV2922-1CP0 | 2,740 |
| | 110 | | S00....S3 | 3RV2922-1CV0 | 2,810 |
| | 230 | | S00....S3 | 3RV2922-1CV1 | 2,810 |
| | Rated control supply voltage V DC | | | | |
| | 24 | | S00....S3 | 3RV2922-1CB0 | 2,810 |
|  | **Shunt trip units** | | | | |
| | Rated control supply voltage V AC 50 Hz, 100% on period | | | | |
| | 20...24 | | S00....S3 | 3RV2902-1DB0 | 2,010 |
| | 90...110 | | S00....S3 | 3RV2902-1DF0 | 2,010 |
| | 210...240 | | S00....S3 | 3RV2902-1DP0 | 2,010 |
| | 350...415 | | S00....S3 | 3RV2902-1DV0 | 2,010 |
| | 500 | | S00....S3 | 3RV2902-1DS0 | 2,010 |

## Accessories



| | Version | Colour of handle | Version of extention shaft (mm) | For motor starter protectir/circuit breakers<br>Size | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|
|  | **Door-coupling rotary operating mechanisms** | | | | | |
| | | Black | 130<br>330 | S00...S3<br>S00...S3 | 3RV2926-1B<br>3RV2926-1K | 3,299<br>3,894 |
| | **EMEMERGENCY-STOP door-coupling rotary operating mechanisms** | | | | | |
| | | Red<br>Yellow | 130<br>330 | S00...S3<br>S00...S3 | 3RV2926-1C<br>3RV2926-1L | 3,832<br>4,506 |
|  | **Door-coupling rotary operating mechanisms for ardous conditions** | | | | | |
| | Door coupling rotary operating mechanisms | Grey | 330 | S00, S0<br>S2<br>S3 | 3RV2926-3B<br>3RV2936-3B<br>3RV2946-3B | 6,408<br>6,945<br>7,442 |
| | Emergency STOP door-coupling operating mechanisms | Red / Yellow | 330 | S00, S0<br>S2<br>S3 | 3RV2926-3C<br>3RV2936-3C<br>3RV2946-3C | 6,945<br>7,566<br>7,938 |
|  | Plug-in lugs For screwing the motor starter protector onto mounting plates<br><br>For each motor starter protector 2 units are required | | | S00, S0 | 3RV2928-0B | 22.70 |

# SIRIUS 3RV2 Motor Starter Protector / Circuit Breaker

## Accessories

| | Modular Spacing mm | Number of motor starter protectors that can be connected: Without lateral accessories | With lateral auxiliary switch | incl. auxiliary release | Rated Current at 690 V | For motor starter protectir/circuit breakers Size | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|---|
| | **Three-phase busbars**<br>For feeding several motor starter protectors with screw terminals, mounted side by side on standard mounting rails, insulated, with touch protection | | | | | | | |
|  | 45 | 2 | -- | -- | 63 | S00, S0 | 3RV1915-1AB | 670 |
| | | 3 | -- | -- | 63 | S00, S0 | 3RV1915-1BB | 810 |
| | | 4 | -- | -- | 63 | S00, S0 | 3RV1915-1CB | 890 |
| | | 5 | -- | -- | 63 | S00, S0 | 3RV1915-1DB | 1,010 |
|  | 55 | -- | 2 | -- | 63 | S00, S0 | 3RV1915-2AB | 640 |
| | | -- | 3 | -- | 63 | S00, S0 | 3RV1915-2BB | 780 |
| | | -- | 4 | -- | 63 | S00, S0 | 3RV1915-2CB | 870 |
| | | -- | 5 | -- | 63 | S00, S0 | 3RV1915-2DB | 980 |
| | | 2 | -- | -- | 108 | S2 | 3RV1935-1A | 1,220 |
| | | 3 | -- | -- | 108 | S2 | 3RV1935-1B | 1,550 |
| | | 4 | -- | -- | 108 | S2 | 3RV1935-1C | 1,820 |
|  | 63 | -- | -- | 2 | 63 | S00, S0 | 3RV1915-3AB | 690 |
| | | -- | -- | 4 | 63 | S00, S0 | 3RV1915-3CB | 870 |
| | 75 | -- | 2 | 2 | 108 | S2 | 3RV1935-3A | 1,500 |
| | | -- | 3 | 3 | 108 | S2 | 3RV1935-3B | 1,780 |
| | | -- | 4 | 4 | 108 | S2 | 3RV1935-3C | 2,080 |

| | Version | Modular Spacing mm | For motor starter protectir/circuit breakers Size | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|
|  | For connecting three-phase busbars for motor starter protectors of size S0 (left) to size S00 (right) | 45 | S00, S0 | 3RV1915-5DB | 690 |

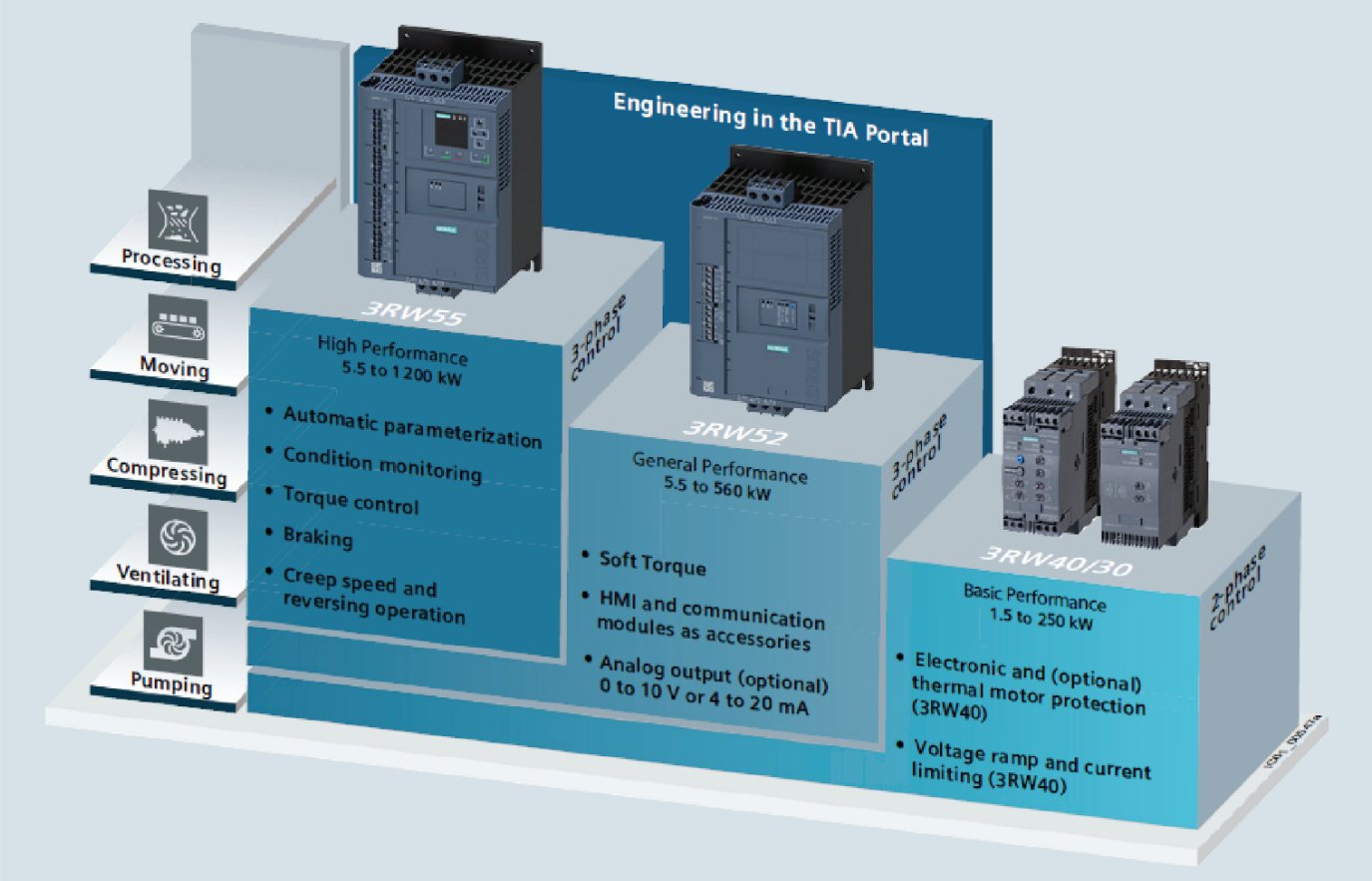
| | Solid or Standarded mm² | Conductor cross-section: Finely stranded with end sleeve mm² | AWG cables solid or stranded AWG | Tightening Torque | For motor starter protectir/circuit breakers Size | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|---|---|---|
| | **Connection from top** | | | | | | |
|  | 2.5...25 | 4...16 | 10...4 | 4 | S00 | 3RV1915-5A | 670 |
| | 2.5...25 | 2.5...16 | 10...4 | 3...4 | S00, S0 | 3RV2925-5AB | 690 |
|  | 2 X (2.5...50) | 2 X (2.5...35) | 2 X (10....1/0) | 4...6 | S2 | 3RV2935-5A | 1,250 |
| | 1 X (2.5...70) | 2 X (2.5...50) | 1 X (10....2/0) | | | | |
| | **Connection from top**<br>Terminal is connected in place of a switch, take space requirement into account | | | | | | |
|  | 2.5...25 | 2.5...16 | 10...4 | Input:4, Output: 2...2.5 | S00, S0 | 3RV2915-5B | 950 |

# 3RW Soft Starter

## Product Overview

โซลูชันที่เหมาะสมที่สุดสำหรับมอเตอร์สามเฟสที่ต้องการประสิทธิภาพเหนือกว่าการสตาร์ทแบบ Direct-On-Line หรือ Star/Delta โดย SIRIUS 3RW Soft Starter ถูกออกแบบมาเพื่อลดแรงกระแทกทางกลของเครื่องจักรและป้องกันแรงดันตกในระบบไฟฟ้า ครบครันด้วยฟังก์ชันมากมายสำหรับการทำงานร่วมกับมอเตอร์ รองรับการใช้งานได้หลากหลาย มอบการสตาร์ทที่นุ่มนวล มีประสิทธิภาพสูง และตอบโจทย์แทบทุกแอปพลิเคชัน






| Article No. scheme | | Article Number | |
|---|---|---|---|
| **Product versions** | | | |
| Device type | **High Performance soft starters** | **3RW35** | ☐☐–☐☐☐☐☐ |
| | **General Performance soft starter** | **3RW52** | ☐☐–☐☐☐☐☐ |
| | **Basic Performance soft starers** | **3RW40**<br>**3RW30** | ☐☐–☐☐☐☐☐<br>☐☐–☐☐☐☐☐ |
| Sized/rated operational current $I_e$ | e.g. 15 = 25 A in size S1 | | ☐☐ |
| Connection type | e.g. 1 = screw terminal | | ☐ |
| Soft starter functionality | e.g. AC = with bypass and analog output. three-phase controller | | ☐☐ |
| Rated contro supply voltage $U_s$ | e.g. 0 = 24 V AC/DC | | ☐ |
| Rated operational voltage $U_e$ | e.g. 4 = 200 ... V AC | | ☐ |
| Example | e.g. 4 = 200 ... V AC | **3RW52** | **15-1AC04** |

Note:
The Article No. scheme shows an overview of product versions fot better understanding of the logic behind the article numbers.
For you oreder please use the article numbers quoted in the selection and ordering data.

# 3RW Soft Starter

## For normal Starting (Class 10)






3

| Ambient temperature 40˚C<br>Rated values of three-phase motors | | | | | |
|---|---|---|---|---|---|
| **Size** | **Operational Current, Ie**<br>**A** | **Rated at Operational voltage Ue**<br>**400V**<br>**kW** | **Rated control Supply voltage, Us at 50/60 Hz** | **รุ่นสินค้า** | **ราคา/หน่วย (บาท)** |
| **Rated operational voltage Ue, 200...480V** | | | | | |
| S00 | 3.6 | 1.5 | 110....230 V AC/DC | 3RW3013-1BB14 | Price On Request |
| | 6.5 | 3 | 110....230 V AC/DC | 3RW3014-1BB14 | Price On Request |
| | 9 | 4 | 110....230 V AC/DC | 3RW3016-1BB14 | Price On Request |
| | 12.5 | 5.5 | 110....230 V AC/DC | 3RW3017-1BB14 | Price On Request |
| | 17.6 | 7.5 | 110....230 V AC/DC | 3RW3018-1BB14 | Price On Request |
| S0 | 25 | 11 | 110....230 V AC/DC | 3RW3026-1BB14 | Price On Request |
| | 32 | 15 | 110....230 V AC/DC | 3RW3027-1BB14 | Price On Request |
| | 38 | 18.5 | 110....230 V AC/DC | 3RW3028-1BB14 | Price On Request |
| | 45 | 22 | 110....230 V AC/DC | 3RW3036-1BB14 | Price On Request |
| | 63 | 30 | 110....230 V AC/DC | 3RW3037-1BB14 | Price On Request |
| | 72 | 37 | 110....230 V AC/DC | 3RW3038-1BB14 | Price On Request |
| | 80 | 45 | 110....230 V AC/DC | 3RW3047-1BB14 | Price On Request |
| | 106 | 55 | 110....230 V AC/DC | 3RW3048-1BB14 | Price On Request |

Note:

* For further clarification and other coil voltages, please contact your sales representative

# 3RW40 & 3RW50 Soft Starters

## For normal Starting (Class 10)








| Ambient temperature 40˚C<br>Rated values of three-phase motors | | | | | |
|---|---|---|---|---|---|
| **Size** | **Operational Current, Ie**<br>**A** | **Rated at Operational voltage Ue**<br>**400V**<br>**kW** | **Rated control Supply voltage, Us at 50/60 Hz** | **รุ่นสินค้า** | **ราคา/หน่วย (บาท)** |
| **Rated operational voltage Ue, 200...480V** | | | | | |
| S0 | 12.5 | 5.5 | 110....230 V AC/DC | 3RW4024-1BB14 | Price On Request |
| | 25 | 11 | 110....230 V AC/DC | 3RW4026-1BB14 | Price On Request |
| | 32 | 15 | 110....230 V AC/DC | 3RW4027-1BB14 | Price On Request |
| | 38 | 18.5 | 110....230 V AC/DC | 3RW4028-1BB14 | Price On Request |
| S2 | 45 | 22 | 110....230 V AC/DC | 3RW4036-1BB14 | Price On Request |
| | 63 | 30 | 110....230 V AC/DC | 3RW4037-1BB14 | Price On Request |
| | 72 | 37 | 110....230 V AC/DC | 3RW4038-1BB14 | Price On Request |
| | 80 | 45 | 110....230 V AC/DC | 3RW4046-1BB14 | Price On Request |
| | 106 | 55 | 110....230 V AC/DC | 3RW4027-1BB14 | Price On Request |
| **Rated operational voltage Ue, 200...460V** | | | | | |
| S6 | 143 | 75 | 110....230 V AC/DC | 3RW5055-6AB14 | Price On Request |
| | 171 | 90 | 110....230 V AC/DC | 3RW5056-6AB14 | Price On Request |
| S12 | 210 | 110 | 110....230 V AC/DC | 3RW5072-6AB14 | Price On Request |
| | 250 | 132 | 110....230 V AC/DC | 3RW5073-6AB14 | Price On Request |
| | 315 | 160 | 110....230 V AC/DC | 3RW5074-6AB14 | Price On Request |
| | 370 | 200 | 110....230 V AC/DC | 3RW5075-6AB14 | Price On Request |
| | 470 | 250 | 110....230 V AC/DC | 3RW5076-6AB14 | Price On Request |
| | 570 | 315 | 110....230 V AC/DC | 3RW5077-6AB14 | Price On Request |

Note:
* For further clarification and other coil voltages, please contact your sales representative

# 3RW52 Soft Starters

## For normal Starting (Class 10)








| Ambient temperature 40˚C<br>Rated values of three-phase motors | | | | | |
|---|---|---|---|---|---|
| **Size** | **Operational Current, Ie**<br>**A** | **Rated at Operational voltage Ue**<br>**400V**<br>**kW** | **Rated control Supply voltage, Us at 50/60 Hz** | **รุ่นสินค้า** | **ราคา/หน่วย (บาท)** |
| **Rated operational voltage Ue, 200...480V** | | | | | |
| S0 | 13 | 5.5 | 110....250 V AC/DC | 3RW5213-1AC14 | Price On Request |
| | 18 | 11 | 110....250 V AC/DC | 3RW5214-1AC14 | Price On Request |
| | 25 | 11 | 110....250 V AC/DC | 3RW5215-1AC14 | Price On Request |
| | 32 | 15 | 110....250 V AC/DC | 3RW5216-1AC14 | Price On Request |
| | 38 | 18.5 | 110....250 V AC/DC | 3RW5217-1AC14 | Price On Request |
| | 47 | 22 | 110....250 V AC/DC | 3RW5224-1AC14 | Price On Request |
| | 63 | 30 | 110....250 V AC/DC | 3RW5225-1AC14 | Price On Request |
| | 77 | 37 | 110....250 V AC/DC | 3RW5226-1AC14 | Price On Request |
| | 93 | 45 | 110....250 V AC/DC | 3RW5227-1AC14 | Price On Request |
| S6 | 113 | 55 | 110....250 V AC/DC | 3RW5234-6AC14 | Price On Request |
| | 143 | 75 | 110....250 V AC/DC | 3RW5235-6AC14 | Price On Request |
| | 171 | 90 | 110....250 V AC/DC | 3RW5236-6AC14 | Price On Request |
| | 210 | 110 | 110....250 V AC/DC | 3RW5243-6AC14 | Price On Request |
| | 250 | 132 | 110....250 V AC/DC | 3RW5244-6AC14 | Price On Request |
| | 315 | 160 | 110....250 V AC/DC | 3RW5245-6AC14 | Price On Request |
| | 370 | 200 | 110....250 V AC/DC | 3RW5246-6AC14 | Price On Request |
| | 470 | 250 | 110....250 V AC/DC | 3RW5247-6AC14 | Price On Request |
| | 570 | 315 | 110....250 V AC/DC | 3RW5248-6AC14 | Price On Request |

Note:

* For further clarification and other coil voltages, please contact your sales representative

# 3RW55 Soft Starters

## For normal Starting (Class 10E)









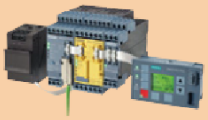
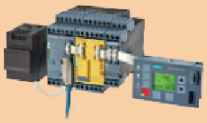
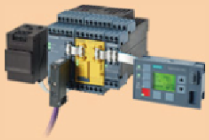
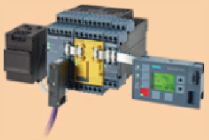
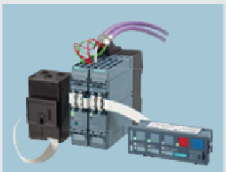
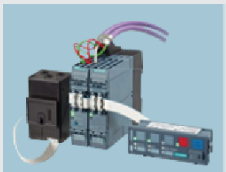
| Ambient temperature 40˚C<br>Rated values of three-phase motors | | | | | |
|---|---|---|---|---|---|
| **Size** | **Operational Current, Ie**<br>**A** | **Rated at Operational voltage Ue**<br>**400V**<br>**kW** | **Rated control Supply voltage, Us at 50/60 Hz** | **รุ่นสินค้า** | **ราคา/หน่วย (บาท)** |
| **Rated operational voltage Ue, 200...480V** | | | | | |
| S0 | 13 | 5.5 | 110....250 V AC/DC | 3RW5513-1HA14 | Price On Request |
| | 18 | 11 | 110....250 V AC/DC | 3RW5514-1HA14 | Price On Request |
| | 25 | 11 | 110....250 V AC/DC | 3RW5515-1HA14 | Price On Request |
| | 32 | 15 | 110....250 V AC/DC | 3RW5516-1HA14 | Price On Request |
| | 38 | 18.5 | 110....250 V AC/DC | 3RW5517-1HA14 | Price On Request |
| | 47 | 22 | 110....250 V AC/DC | 3RW5524-1HA14 | Price On Request |
| | 63 | 30 | 110....250 V AC/DC | 3RW5525-1HA14 | Price On Request |
| | 77 | 37 | 110....250 V AC/DC | 3RW5526-1HA14 | Price On Request |
| | 93 | 45 | 110....250 V AC/DC | 3RW5527-1HA14 | Price On Request |
| S6 | 113 | 55 | 110....250 V AC/DC | 3RW5534-6HA14 | Price On Request |
| | 143 | 75 | 110....250 V AC/DC | 3RW5535-6HA14 | Price On Request |
| | 171 | 90 | 110....250 V AC/DC | 3RW5536-6HA14 | Price On Request |
| | 210 | 110 | 110....250 V AC/DC | 3RW5543-6HA14 | Price On Request |
| | 250 | 132 | 110....250 V AC/DC | 3RW5544-6HA14 | Price On Request |
| | 315 | 160 | 110....250 V AC/DC | 3RW5545-6HA14 | Price On Request |
| | 370 | 200 | 110....250 V AC/DC | 3RW5546-6HA14 | Price On Request |
| | 470 | 250 | 110....250 V AC/DC | 3RW5547-6HA14 | Price On Request |
| | 570 | 315 | 110....250 V AC/DC | 3RW5548-6HA14 | Price On Request |
| | 630 | 355 | 110....250 V AC/DC | 3RW5552-6HA14 | Price On Request |
| | 720 | 400 | 110....250 V AC/DC | 3RW5553-6HA14 | Price On Request |
| | 840 | 450 | 110....250 V AC/DC | 3RW5554-6HA14 | Price On Request |
| | 1100 | 560 | 110....250 V AC/DC | 3RW5556-6HA14 | Price On Request |
| | 1280 | 710 | 110....250 V AC/DC | 3RW5558-6HA14 | Price On Request |

# SIMOCODE PRO Motor Management and Control Devices

## Product Overview

โซลูชันบริหารจัดการมอเตอร์แรงดันต่ำสำหรับอุตสาหกรรมกระบวนการครอบคลุมการป้องกันการมอนิเตอร์ และการควบคุมช่วยให้ระบบทำงานได้อย่างราบรื่นด้วยการติดตามข้อมูลสำคัญแบบเรียลไทม์และการสั่งหยุดมอเตอร์อย่างปลอดภัย ซอฟต์แวร์อัจฉริยะ SIMOCODE ทำให้การออกแบบ การติดตั้ง การคอมมิชชัน การวินิจฉัย และการบำรุงรักษาระบบมอเตอร์เป็นเรื่องง่าย รวดเร็ว และเชื่อถือได้ พร้อมเพิ่มการมองเห็นภาพรวมของระบบแบบเรียลไทม์ มอบความยืดหยุ่นและความเชื่อมั่นในการรับมือทุกความท้าทายใหม่ๆ เลือก SIMOCODE คือก้าวสำคัญสู่การบริหารจัดการมอเตอร์ที่มีประสิทธิภาพ ปลอดภัย และพร้อมรองรับอนาคต

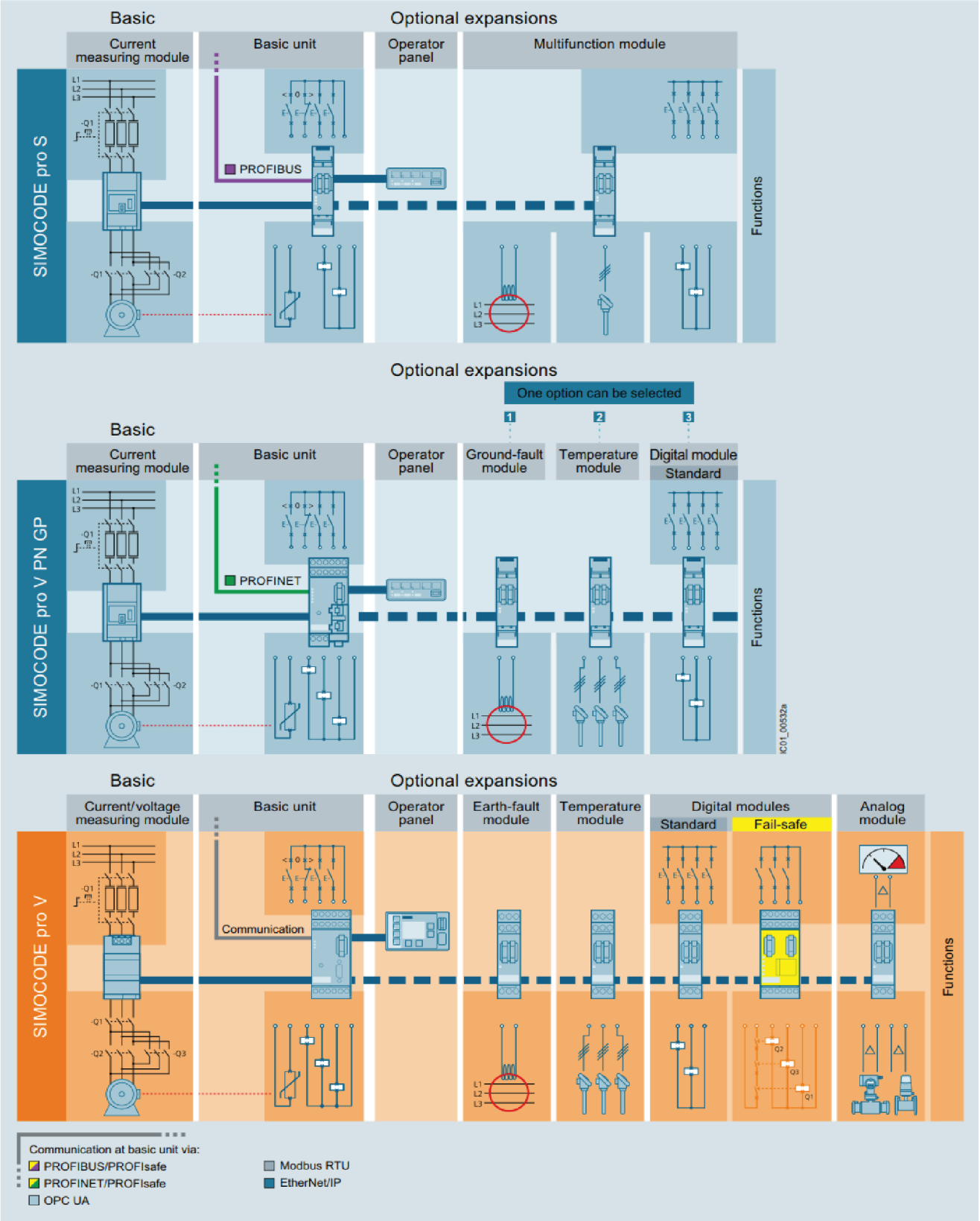


| | PROFINET IO / OPC UA | ETHERNET / IP | PROFIBUS | MODBUS RTU | |
|---|---|---|---|---|---|
| Current/voltage measuring module<br>Opretor panel with display<br>Max. 5/7 expansion modules<br>Safety<br>Extended control functions (e.g. positioner, pole-changing starter) |  SIMOCODE pro V PN |  SIMOCODE pro V EIP |  SIMOCODE pro V PB |  SIMOCODE pro V PB | High Performance |
| Current measuring module<br>Opretor panel<br>1 expansion module<br>Basic control functions (e.g. direct-on-line/reversing start) |  SIMOCODE pro V PN GP | |  SIMOCODE pro V S |  SIMOCODE pro V S | General Performance |

# DEVICE SERIES

1. General Performance with SIMOCODE PRO S or SIMOCODE PRO V PN GP
2. High Performance with SIMOCODE PRO V

## Structure of Simocode Pro s / Simocode Pro V



# SIMOCODE PRO Motor Management and Control Devices

## SIMOCODE PRO S

The SIMOCODE PRO S device series is presently the smart system for direct-on-line, reversing, and star-delta starters or for controlling a motor starter protector or soft starter. Its expandability with a multi-function module provides comprehensive input/output project data volume, precise ground-fault detection via the 3UL23 residual-current transformers and temperature measurement.



| | Description | Configurator | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|
|  | **SIMOCODE PRO S Base Unit** | | | |
| | PROFIBUS interface, 1.5Mbps, RS485 | | | |
| | 4 I/2O freely assignable, input for thermistor connection, | | | |
| | monostable relay outputs | | | |
| | Rated control supply voltage, Us: | | | |
| | - 24V DC | | 3UF7020-1AB01-0 | Price On Request |
| | - 110-240V AC/DC | | 3UF7020-1AU01-0 | Price On Request |
|  | **Current Measuring Module** | | | |
| | Straight Through Transformer | | | |
| | - 0.3 - 3A | | 3UF7100-1AA00-0 | Price On Request |
| | - 2.4 - 25A | | 3UF7101-1AA00-0 | Price On Request |
| | - 10 - 100A | | 3UF7102-1AA00-0 | Price On Request |
| | - 20 - 200A | | 3UF7103-1AA00-0 | Price On Request |
| | Busbar Connection | | | |
| | - 20 - 200A | | 3UF7103-1BA00-0 | Price On Request |
| | - 63 - 630A | | 3UF7104-1BA00-0 | Price On Request |
|  | **Malfunction modules** | | | |
| | DC 24 V | | 3UF7600-1AB01-0 | Price On Request |
| | 110 ....240 V AC / DC | | 3UF7600-1AU01-0 | Price On Request |
|  | **Operator Panel** | | 3UF7200-1AA01-0 | Price On Request |

## SIMOCODE PRO V

SIMOCODE PRO V, as a variable motor management system with all control functions and with the possibility of expanding the inputs, outputs and functions of the system at with using the expansion modules.

| | Description | Configurator | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|
|  | **SIMOCODE PRO V PROFIBUS Base Unit**<br>PROFIBUS DP interface, 1.5Mbps, RS485<br>4 I/ 3O, input for thermistor connection<br>Rated control supply voltage, Us<br>- 24V DC<br>- 110-240V AC/DC | | <br><br><br><br>3UF7020-1AB01-0<br>3UF7020-1AU01-0 | <br><br><br><br>Price On Request<br>Price On Request |
|  | **SIMOCODE PRO V PROFINET GP Base Unit**<br>Ethernet /PROFINET IO, OPC UA server and web server, 100Mbps, PROFINET system redundancy,<br>4 I/ 3O, input for thermistor connection<br>2 x connection to bus through RJ45<br>Media Redundancy Protocol<br>Rated control supply voltage, Us<br>- 24V DC<br>- 110-240V AC/DC<br>1 x connection to bus through RJ45<br>Rated control supply voltage, Us<br>- 24V DC<br>- 110-240V AC/DC | | <br><br><br><br><br><br>3UF7011-1AB00-1<br>3UF7011-1AU00-1<br><br><br>3UF7011-1AB00-2<br>3UF7011-1AU00-2 | <br><br><br><br><br><br>Price On Request<br>Price On Request<br><br><br>Price On Request<br>Price On Request |
|  | **SIMOCODE PRO V PROFINET Base Unit**<br>Ethernet /PROFINET IO, OPC UA server and web server, 100Mbps, 2 x connection to bus thru RJ45,<br>PROFINET system redundancy, media redundancy<br>4 I/ 3O, input for thermistor connection<br>Rated control supply voltage, Us<br>- 24V DC<br>- 110-240V AC/DC | | <br><br><br><br><br><br>3UF7011-1AB00-0<br>3UF7011-1AU00-0 | <br><br><br><br><br><br>Price On Request<br>Price On Request |
|  | **SIMOCODE PRO V PROFINET Base Unit**<br>Simocode Pro V Modbus RTU Basic Unit<br>Modbus RTU interface, 57.6 Kbps, RS485,<br>4 I/3O, input for thermistor connection<br>Rated control supply voltage, Us<br>- 24V DC<br>- 110-240V AC/DC | | <br><br><br><br><br>3UF7012-1AB00-0<br>3UF7012-1AU00-0 | <br><br><br><br><br>Price On Request<br>Price On Request |
|  | **SIMOCODE PRO V Ethernet /IP Basic Unit**<br>Ethernet/IP interface, web server, 100Mbps,<br>2 x connection to bus through RJ45, DLR media redundancy, 4 I3/O, input for thermistor connection<br>Rated control supply voltage, Us<br>- 24V DC<br>- 110-240V AC/DC | | <br><br><br><br>3UF7013-1AB00-0<br>3UF7013-1AU00-0 | <br><br><br><br>Price On Request<br>Price On Request |

# SIMOCODE PRO Motor Management and Control Devices

## SIMOCODE PRO V

SIMOCODE PRO V, as a variable motor management system with all control functions and with the possibility of expanding the inputs, outputs and functions of the system at with using the expansion modules.

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| | Description | Configurator | Order Number. | ราคา (บาท) |
|---|---|---|---|---|
|  | **Current/Voltage Measuring Module** | | | |
| | Straight Through Transformer | | | |
| | - 0.3 - 4A | | 3UF7110-1AA01-0 | Price On Request |
| | - 3 - 40A | | 3UF7111-1AA01-0 | Price On Request |
| | - 10 - 1115A | | 3UF7112-1AA01-0 | Price On Request |
| | - 20 - 200A | | 3UF7113-1AA01-0 | Price On Request |
| | Busbar Connection | | | |
| | - 20 - 200A | | 3UF7113-1BA01-0 | Price On Request |
| | - 63 - 630A | | 3UF7114-1BA01-0 | Price On Request |
|  | **Current/Voltage Measuring Module for dryrunning protection of centrifugal pumps in hazardous area** | | | |
| | Straight Through Transformer | | | |
| | - 0.3 - 4A | | 3UF7120-1AA01-0 | Price On Request |
| | - 3 - 40A | | 3UF7121-1AA01-0 | Price On Request |
| | - 10 - 1115A | | 3UF7122-1AA01-0 | Price On Request |
| | - 20 - 200A | | 3UF7123-1AA01-0 | Price On Request |
| | Busbar Connection | | | |
| | - 20 - 200A | | 3UF7123-1BA01-0 | Price On Request |
| | - 63 - 630A | | 3UF7124-1BA01-0 | Price On Request |
|  | **Operator Panel with display** | | | |
| | > Titan grey | | | |
| | - English/ German / French / Spanish / Portuguese / Italian / Polish/ Finnish | | 3UF7210-1AA01-0 | Price On Request |
| | - English / Chinese / Russian / Korean | | 3UF7210-1BA01-0 | Price On Request |

## Expansion Modules for SIMOCODE PRO V

With SIMOCODE PRO V, it is possible to expand the type and number of inputs and outputs in steps. Each expansion module has two system interfaces on the front. Through the one system interface the expansion module is connected to the system interface of the SIMOCODE PRO V using a connection cable; through the second system interface, further expansion modules or the operator panel can be connected. The power supply for the expansion modules is provided by the connection cable through the basic unit.

| Description | | Configurator | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|---|
|  **Digital Module**<br>4 Binary Input & 2 relay output<br>Relay Output / Input voltage<br>Monostable / DC 24 V<br>Monostable / AC/DC 110-240V<br>Bistable / DC 24 V<br>Bistable / AC/DC 110-240V | | | 3UF7300-1AB00-0<br>3UF7300-1AU00-0<br>3UF7310-1AB00-0<br>3UF7310-1AU00-0 | Price On Request<br>Price On Request<br>Price On Request<br>Price On Request |
|  **Ground Fault Module**<br>1 input for connecting a 3UL23 residual-current transformer, up to 1 ground-fault module can be connected. | | | 3UF7510-1AA00-0 | Price On Request |
|  **Temperature Module**<br>3 inputs for connecting up to 3 analog temperature sensors, up to one temperature module can be connected per pro V PB/MB RTU basic unit and up to two temperature modules per pro V PN/EIP basic unit. | | | 3UF7700-1AA00-0 | Price On Request |
|  **Analog Module**<br>Basic Unit 2 can be optionally expanded with analog inputs and outputs (0/4 ... 20 mA) by means of the analog module. 2 inputs (passive) for input and 1 output for output of 0/4 ... 20 mA signals, max. 1 analog module can be connected per basic unit. | | | 3UF7400-1AA00-0 | Price On Request |
|  **Fail-safe expansion modules**<br>DM-F Local fail-safe digital modules<br>DC 24 V<br>AC/DC 110-240V | | | 3UF7320-1AB00-0<br>3UF7320-1AU00-0 | Price On Request<br>Price On Request |
|  **DM-F PROFIsafe fail-safe digital modules**<br>DM-F Local fail-safe digital modules<br>DC 24 V<br>AC/DC 110-240V | | | 3UF7330-1AB00-0<br>3UF7330-1AU00-0 | Price On Request<br>Price On Request |

# SIMOCODE PRO Motor Management and Control Devices



| Description | Configurator | รุ่นสินค้า | ราคา/หน่วย (บาท) |
|---|---|---|---|
|  **Data Cable** | | | |
| 0.025m Flat | | 3UF7930-0AA00-0 | Price On Request |
| 0.1m Flat | | 3UF7931-0AA00-0 | Price On Request |
| 0.15m Flat | | 3UF7934-0AA00-0 | Price On Request |
| 0.3m Flat | | 3UF7935-0AA00-0 | Price On Request |
| 0.5m Flat | | 3UF7932-0AA00-0 | Price On Request |
| 0.5m Round | | 3UF7932-0BA00-0 | Price On Request |
| 1.0m Round | | 3UF7937-0BA00-0 | Price On Request |
| 2.5m Round | | 3UF7933-0BA00-0 | Price On Request |
|  **USB PC Cables & Adapters** | | | |
| USB PC Cables | | 3UF7941-0AA00-0 | Price On Request |
| USB / Serial adapters | | 3UF7946-0AA00-0 | Price On Request |
|  **Memory Module for SIMOCODE PRO S and PRO V** | | | |
| For parameterizing SIMOCODE Pro system | | | |
| Titanium Gray | | 3UF7901-0AA01-0 | Price On Request |
|  **Addressing Plug** | | | |
| For assigning the PROFIBUS addresses | | 3UF7910-0AA00-0 | Price On Request |
|  **Interface Covers** | | | |
| For System interface | | | |
| • Titanium grey | | 3RA6936-0B | Price On Request |

# SIMOCODE PRO Motor Management and Control Devices



| Version | | Article No. | Price Per PU |
|---|---|---|---|
| **SIMOCODE ES V19 Basic** | | | |
| | **Basic functional scope Including Professional trial license**<br>Engineering software, class A, 6 languages (German/English/ Chinese included, French/Italian/Spanish as a download), for all SIMOCODE pro, online functions via system interface<br>Type of delivery: Software and documentation available as a free download, see:<br>https://support.industry.siemens.com/cs/ww/en/view/109631431 | | |
| **SIMOCODE ES V19 Professional** | | | |
| <br>3ZS1322-6CC17-0YA5 | **Floating license for one user**<br>Engineering software, class A, 6 languages, Combo license for parallel use of versions 2007 and V19 of SIRIUS ES, for al SIMOCODE pro, online functions via system interface and PROFIBUS/PROFINET/Ethernet, parameterizing with the integrated graphics editor (CFC-based).<br>Type of delivery<br>• Software and documentation on DVD and floating license on USB flash drive | 3ZS1322-6CC17-0YA5 | |
| <br>3ZS1322-6CE17-0YB5 | • Software and documentation as a download and floating license as a download | 3ZS1322-6CC17-0YA5 | |
| <br>3ZS1322-6CC16-0YE5 | **Upgrade for SIMOCODE ES 2007 Standard/Premium**<br>Engineering software, class A, 6 languages, Combo license for parallel use of versions 2007 and V19 of SIRIUS ES, for al SIMOCODE pro, online functions via system interface and PROFIBUS/PROFINET/Ethernet, parameterizing with the integrated graphics editor (CFC-based).<br>Type of delivery<br>• Software and documentation on DVD and floating license on USB flash drive | 3ZS1322-6CC16-0YE5 | |
| <br>3ZS1322-6CC00-0YL5 | **Software update service**<br>For 1 year with automatic extension, requires software version of SIMOCODE ES (TIA Portal), engineering software, class A, online function via system interface and PROFIBUS/PROFINET/Ethernet, parameterizing with intergrated graphics editor (CFC-based).<br>Type of delivery<br>• Software and documentation on DVD | 3ZS1322-6CC00-0YL5 | |

Notes:

For a description of the software versions, see page 14/13.
Please order PC cable separately, see Accessories.
SIMOCODE ES Standard and Premium V12 to V15 licenses can also be used for SIMOCODE ES V16 to V19 Professional.
Save time, costs and $CO_2$ by using the download option!

# Low Voltage Product Services



## Authorized Service Provider (ASP)

บริการ Low Voltage Product Services สำหรับอุปกรณ์ไฟฟ้าแรงดันต่ำ ที่ครอบคลุมเพื่อเพิ่มประสิทธิภาพการทำงานของคุณจากซีเมนส์

**ผู้ให้บริการที่ได้รับอนุญาตจากซีเมนส์** หรือ **Authorized Service Provider (ASP)** คือผู้ให้บริการผลิตภัณฑ์ไฟฟ้าแรงดันต่ำของเราที่ผ่านการรับรองจากซีเมนส์ คุณสามารถมั่นใจในคุณภาพที่เราคัดสรรให้

ASP พร้อมมอบโซลูชันด้านไฟฟ้าคุณภาพสูงด้วยความรวดเร็ว และน่าเชื่อถือโดยผู้เชี่ยวชาญของเราทุ่มเทเพื่อการบริการที่เหนือความคาดหมาย สำหรับอุปกรณ์ไฟฟ้า แรงดันต่ำทุกประเภทของคุณ

Authorized Service Provider Low Voltage Products

SIEMENS

ปรึกษากับทีมผู้เชี่ยวชาญของเรา**โดยไม่มีค่าใช้จ่าย**

**Siemens Thailand Electrical Products**

**E-mail: electricalproducts.th@siemens.com**

# อุปกรณ์ไฟฟ้าแรงดันต่ำ

## ผลิตภัณฑ์และขอบเขตการให้บริการของเรา





### บริการอะไหล่สำรอง (Spare Parts)

จัดหาอะไหล่แท้คุณภาพจากซีเมนส์จากทั่วโลกอย่างรวดเร็วพร้อมแพคเกจที่ปรับเปลี่ยนได้ตามความต้องการเฉพาะช่วยให้คุณบริหารสต็อกได้อย่างมีประสิทธิภาพและคุ้มค่า

### บริการอัปเกรดและปรับปรุงให้ทันสมัย (Retrofit & Modernization)

อัปเกรดเพื่อความปลอดภัยและเชื่อถือได้ ช่วยยืดอายุการใช้งานและเพิ่มประสิทธิภาพให้ระบบที่สำคัญของคุณ

### บริการซ่อมแซมและบำรุงรักษา (Repair Services)

บริการซ่อมแซมฉุกเฉินและบำรุงรักษาเชิงป้องกันเพื่อลดโอกาสการเกิดปัญหาและการหยุดชะงักในอนาคต



**SENTRON 3WL and 3WT8**
**Air Circuit Breakers**



**SENTRON 7KM Power Meter**
**SIRIUS 3RW5 Soft Starter**



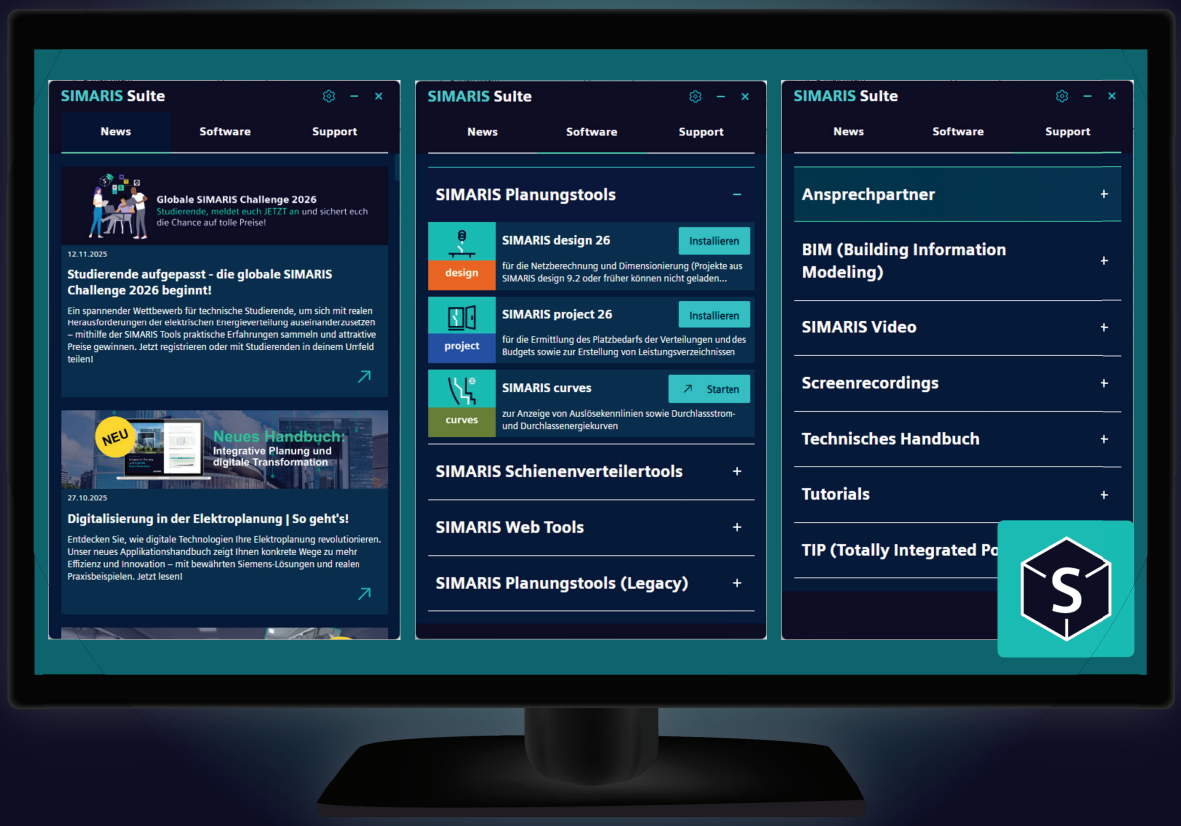
**SIRIUS 3UF5 and 3UF7**
**SIMOCODE**



**SENTRON 3VA and 3VL**
**Molded Case Circuit Breakers**

| Description for Service Cost<br>การบริการ | Unit<br>หน่วย | Criteria<br>ประเภท | Rate/man days (THB per Unit)<br>อัตราค่าบริการ/วันทำงาน (บาท) |
|---|---|---|---|
| **On-site Service** | Man day | Engineer<br>Electrician | Start at 15,000 THB<br>Start at 3,000 THB |
| **On-call Service / Remote support** | Case | | Start at 15,000 THB |
| **Training Course (Applications)** | THB/Day | Limit not over 10 persons | Start at 20,000 THB |
| **Accommodation** | THB/Day | | Based on actual |
| **Extra for Lodging, Local Conveyance etc. applicable for beyond 50KM City limits - Outside City** | | Maximum limit only for per site working days | 6THB/km |

# SIMARIS Suite
## Electrical Planning Software




**อ่านเพิ่มเติม SIMARIS Suite**

**เข้าถึงข้อมูล TIP Training Center**



# SIMARIS Suite Electrical Planning Software

## Product Overview

การวางแผนระบบจ่ายไฟฟ้าในโรงงานอุตสาหกรรม โครงสร้างพื้นฐาน และอาคารต่างๆ มีความซับซ้อนมากขึ้นเรื่อยๆ SIMARIS Planning Tools ช่วยให้นักวางแผนไฟฟ้าทำงานได้รวดเร็วและแม่นยำยิ่งขึ้น พร้อมรองรับการทำงานในรูปแบบ BIM (Building Information Modeling) ทุกเครื่องมือวางแผนของ SIMARIS ถูกรวมไว้ในแพลตฟอร์มเดียวที่ครบครันด้วย SIMARIS Suite



**WHY SIMARIS**

**Smart and intuitive software interfaces** - required no specialized technical knowledge

**Complete system planning** - from MV distribution to end consumers

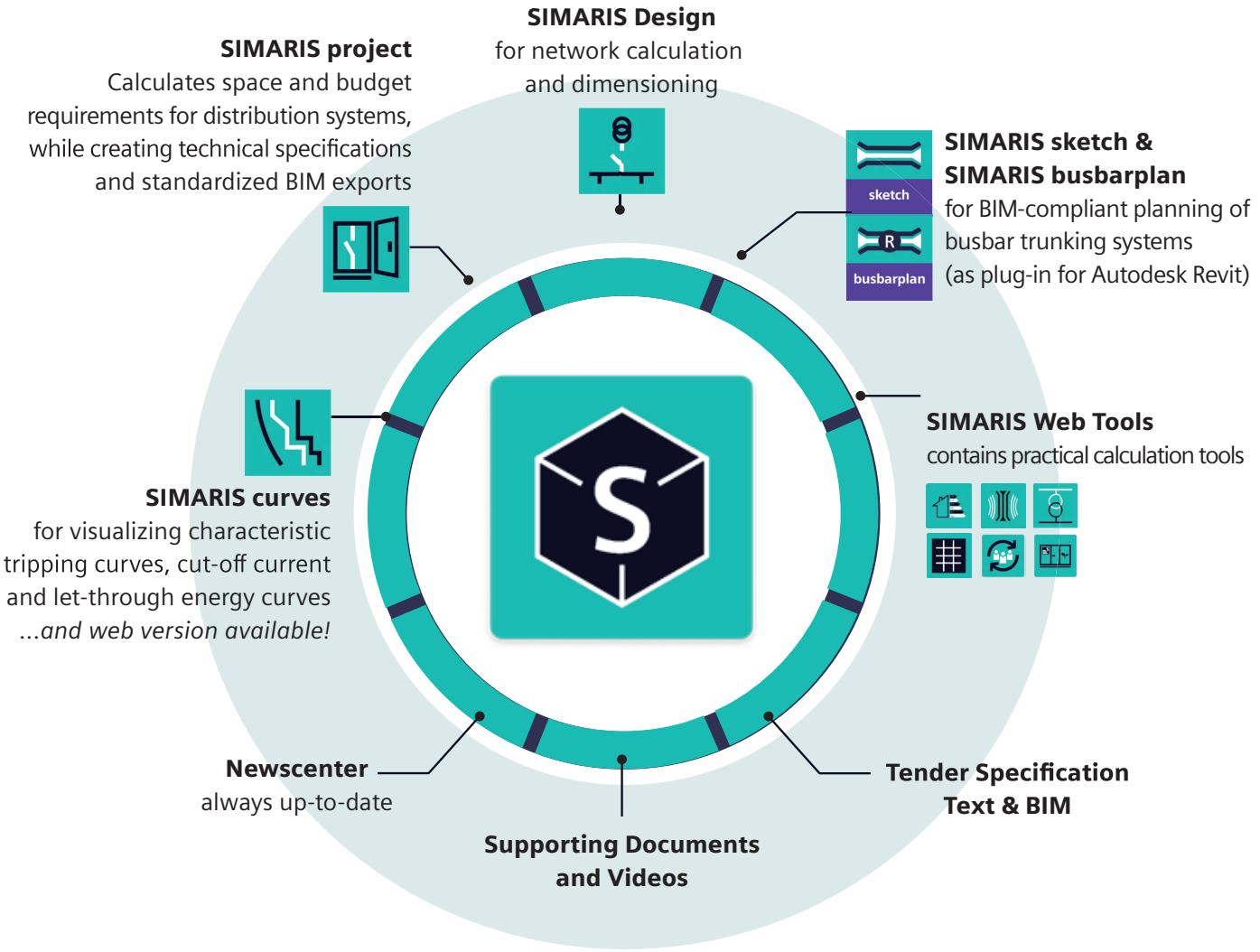
**Automated component matching** - automatically selects compatible components and distribution systems

**Real-world product sizing** - accuracy without needing detailed technical expertise

**Reliable yet flexible planning** - adaptability throughout design and implementation

**Standards compliant** - fully aligned with established IEC and VDE technical regulations

**Future-ready and sustainable** - Integrates renewable energy sources with BIM-compatible forward planning



# SIVACON
## Intelligent Power Distribution



## Product Overview

**SIVACON S4 SWITCHBOARDS – พร้อมเทคโนโลยีดิจิทัล เชื่อถือได้ และยืดหยุ่น**

โครงสร้างพื้นฐานทางไฟฟ้าในปัจจุบันต้องเผชิญกับความท้าทายใหม่ๆ ทั้งจำนวนผู้ใช้ที่เพิ่มขึ้น รูปแบบโหลดที่เปลี่ยนแปลงรวดเร็ว และความต้องการระบบอัตโนมัติที่สูงขึ้น SIVACON S4 มาพร้อมทุกฟังก์ชันที่จำเป็นเพื่อตอบโจทย์ความต้องการเหล่านี้ได้ทันที พร้อมรับมือกับความท้าทายในอนาคตอย่างมั่นใจ



SIVACON S4



ALPHA UNIVERSAL 800



ALPHA UNIVERSAL 630



ALPHA UNIVERSAL 125

### Highlights

- One-stop portfolio for safe power distribution up to 6.300 A
- Failsafe design via SIMARIS configuration
- Enhanced productivity thanks to 3D data provison
- VDE certified systems ensure high reliability
- Enhanced productivity thanks to proven, reliable SIMARIS configuration software and extensive CAx data support

### SIMARIS configuration:

SCF **Project data | Configuration | Calculation | Documentation**

| Technical data | | | ALPHA UNIVERSAL | SIVACON S4 |
|---|---|---|---|---|
| **Standards and regulations** | System for creating design verified solutions | | IEC 61439-1/2/3<br>EN 61439-1/2/3 | IEC 61439-1/2<br>EN 61439-1/2 |
| **Electrical figures main busbar** | Rated operational voltage $U_e$<br>Rated frequency<br>Rated impulse withstand voltage $U_{imp}$ | V AC<br>Hz<br>kV | 690<br>50 / 60<br>Up to 6 | 690<br>50 / 60<br>Up to 12 |
| | Rated current $I_n$<br>Rated peak withstand current $I_{pk}$<br>Rated short-time withstand current $I_{cw}$ | A<br>kA<br>kA, 1s | Up to 800<br>Up tto 53<br>Up to 25 | Up to 4.000 / 6.300 A (mit Lizenz)<br>Up to 220<br>Up to 100 |
| **Degree of protection** | | | Up to IP55 | Up to IP55 |
| **Form of internal separation** | | | Form 1 | Form 1 – 4b |
| **Surface** | Standard parts | | RAL 7035 | RAL 7035 |
| **Depth** | | mm | 140, 250, 400 | 400, 600, 800 |
| **Approbations** | | | VDE | VDE |

# SIVACON S4 Power Distribution Boards, Modular and Flexible





3WA air circuit breakers



High performance and proven quality

3VA molded case circuit breakers



Modular, highly variable system

3NP1 fuse switch disconnectors



Increased safety for operating personnel

3NJ6/3NJ4 in-line fuse switch disconnectors



Space-saving thanks to compact size and easy assembly

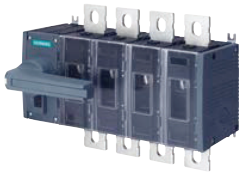


SEM3 multichannel current measuring system



Metering of up to 45 branches of the main distribution

3KD switch disconnectors



Connecting and disconnecting under

8WH terminal blocks



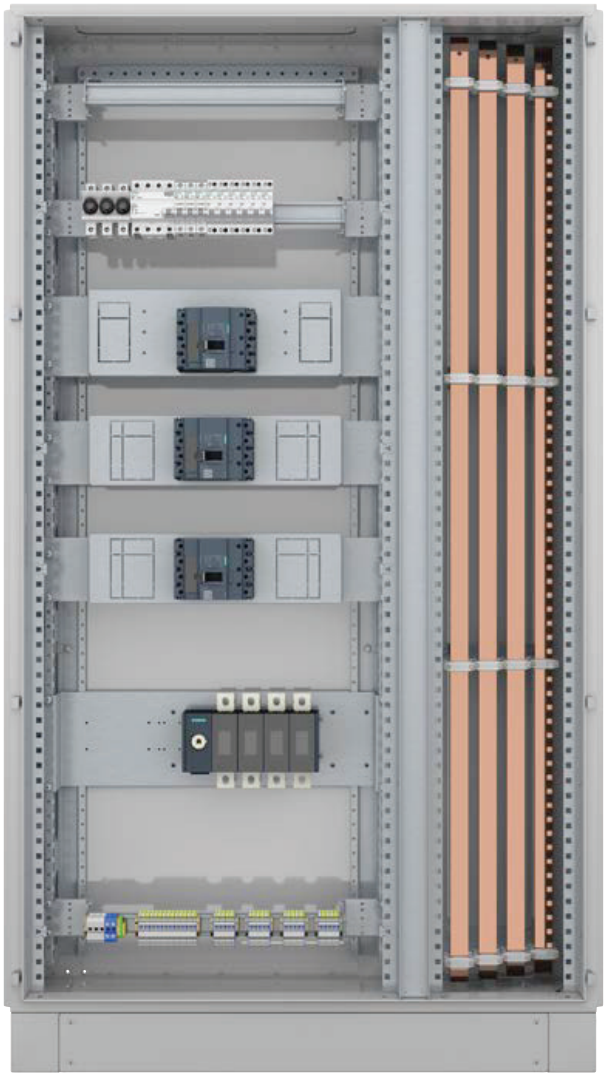
Fast connection and flixivble conductors

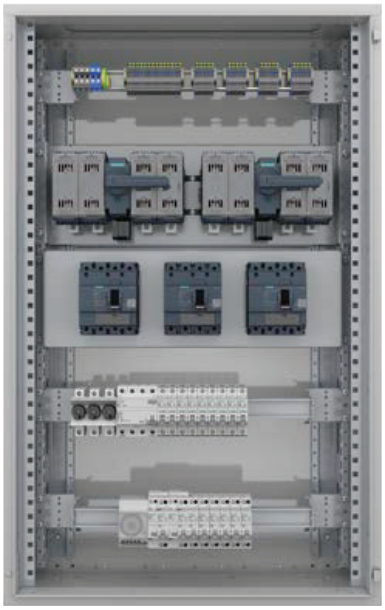
7KM PAC measuring devices



Comprehensive portfolio for power monitoring from entry-level to specialized expert solutions

# ALPHA UNIVERSAL Distribution Boards, Safe and Reliable







7KT PAC 1200 multi channel current measuring system



Cost-effecitve measuring of up to 96 outgoing feeders

5SV3 residual current operated circuit breakers



Reliable protection for people by preventing electrical accidents

5SL miniature circuit breakers



Short-circuit and overload protection due to safe switch-off

5SM6 AFD units

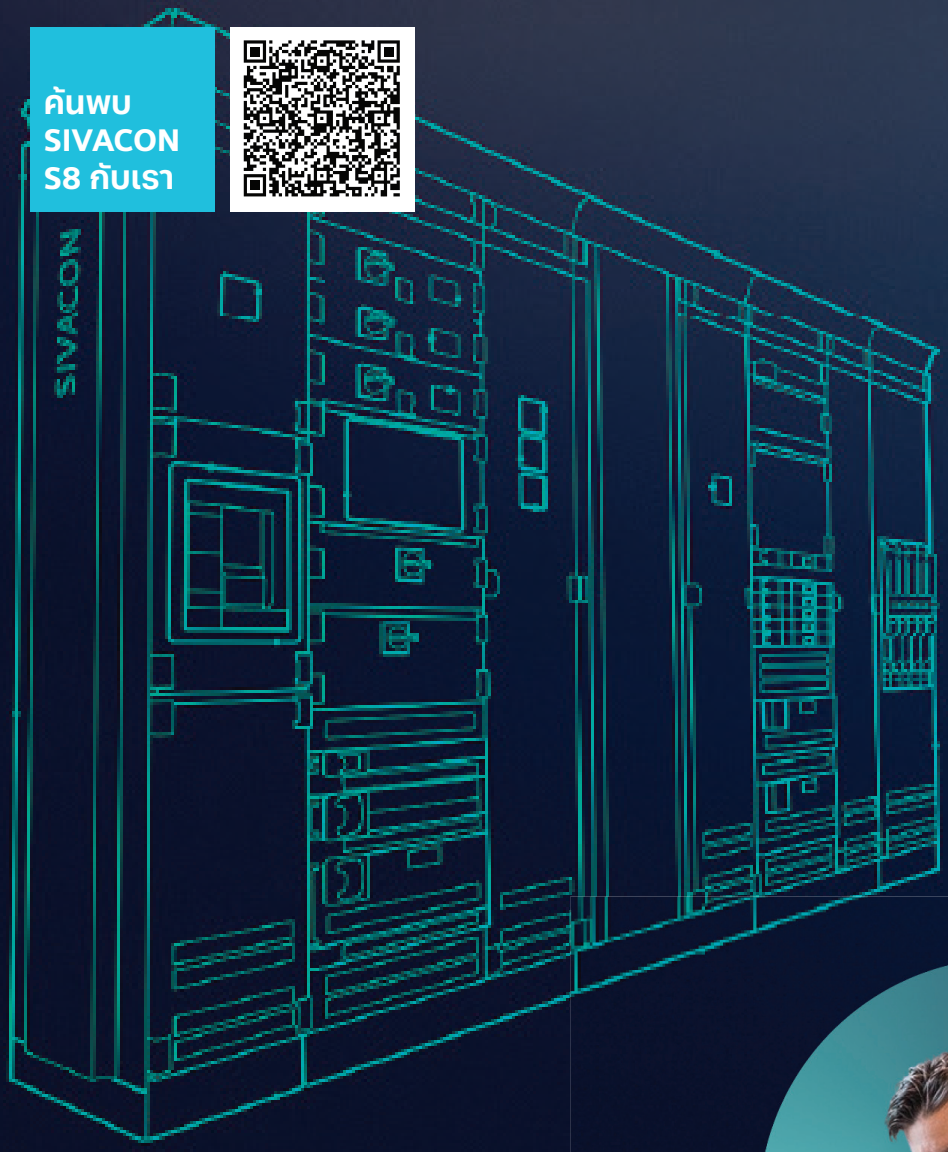


Preventive, proven fire protection against electrical fire

# SIVACON S8

## พันธมิตรทางเทคโนโลยีที่คุณไว้วางใจ
## พร้อมรองรับทุกภาคอุตสาหกรรม

ค้นพบ
SIVACON
S8 กับเรา






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บริษัท ซีเมนส์ จำกัด
111 ทรู ดิจิทัล พาร์ค เวสต์ อาคารยูนิคอร์น
ชั้น 6 ยูนิต 601-602 ถนนสุขุมวิท
แขวงบางจาก เขตพระโขนง
กรุงเทพมหานคร 10260 ประเทศไทย

โทร 0 2079 5465
กด 2 และกด 1 สำหรับผลิตภัณฑ์ไฟฟ้าแรงดันต่ำ สวิตซ์
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อีเมล : electricalproducts.th@siemens.com
เว็บไซต์ : www.siemens.com

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