

## 제품 카타로그

Automation

Industrial applications

Residential and Commercial



Finder는 1954년 이탈리아 알메세 (Almese, Italy)에서 설립되었습니다. 그 이후로 빌딩 및 산업용을 위한 다양한 전자기계 및 전자 부품을 설계하고 제조해 왔습니다.



**14,000+** 이상의 제품으로  
다양한 산업과 용도에 폭넓게  
대응합니다.

### 업계 최다 인증 보유



### FINDER는 이태리 기반의 글로벌 기업입니다.

- 4** 유럽 내, 4개의 생산기지
- 29** 지사
- 80+** 공식 파트너



### ESG (Environmental, Social and Governance)



### 자율경영과 독립성

Finder는 경영·재무·기술 면에서 독립성을 갖추고 있어 모든 업무 과정을 효율적으로 관리합니다. 이를 통해 고객사의 통관 절차가 간소화되고, 비즈니스 신뢰성이 더욱 높아집니다.



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# 8A 시리즈 PLC

## OPTA MAIN MODULES



OEM 프로젝트



Wi-Fi & BLUETOOTH



산업용 애플리케이션



이더넷 & USB 연결



빌딩 자동화



보안



범용성



Modbus RTU and TCP/IP 통신

## OPTA - PLC 8A 시리즈

OPTA PLC는 CODESYS 또는 아두이노 PLC IDE를 사용하여 LADDER, FBD, ST 등 IEC 61131-3 기반의 프로그램을 손쉽게 개발할 수 있습니다. 산업용, OEM, 빌딩자동화 프로그램의 신속한 개발이 가능합니다.

## OPTA EXPANSION MODULES



## SMPS



(according to type)



## 8A 시리즈 - OPTA - PLC

- 8 DI / AI (0...10 V), IDE에서 설정
- 4 DO - 10 A
- USB (type C port) (프로그래밍, 시운전 시 전원 공급, 데이터 로깅)
- RJ45 (Ethernet, Modbus TCP/IP)
- 통신 기능에 따른 3종의 컨트롤러 제공:

- LITE** USB, RJ45 (Ethernet, Modbus TCP/IP etc.)
- Plus** USB, RJ45 (Ethernet, Modbus TCP/IP etc.)  
RS485 (RTU etc.)
- Advanced** USB, RJ45 (Ethernet, Modbus TCP/IP etc.)  
RS485 (RTU etc.)  
와이파이 / 블루투스 모듈 내장

- 프로그램 가능한 USER 버튼
- RESET 버튼
- 사용 언어 IEC-61131-3 (LD - SFC - FBD - ST - IL)
- Programmable via Codesys (only 8A.04-832C)
- 폭 70 mm wide
- 35 mm rail (EN 60715) mount



## 8A 시리즈 - 디지털 확장 모듈

- 16 DI / AI (0...10 V)
- 8 DO (EMR 6 A or SSR 3 A)
- LED 전원 표시등
- 8 DO LED 상태 표시등
- Max. 5개 모듈 확장 가능
- 폭 70 mm
- 35 mm rail (EN 60715) mount



## 8A 시리즈 - 아나로그 확장 모듈

- 6 AI 0...10 V, 4...20 mA, PT100 (2 or 3 wires)
- 2 AO 0...10 V, 4...20 mA
- 4 PWM 출력
- Analog channels programmable
- LED 전원 상태등
- 프로그램 가능한 상태 표시등 (8개)
- Max. 5개 모듈 확장 가능
- 폭 70 mm
- 35 mm rail (EN 60715) mount



## 78 시리즈 - Switch Mode Power Supplies

- Input nominal voltage: 110...240 V AC
- Rated power: 12, 25, 36, 50, 60, 110, 120, 130, 240 W
- Operating range AC/DC: (88...265)V AC or (90...275)V DC
- Output nominal voltage: 12, 24 V DC
- Class A and Class B according EN 55022
- Input protection: replaceable fuse plus spare
- Overvoltage protection: varistor
- From 17.5 to 70 mm wide
- Thermal protection
- Feedback contact versions available

DC Power supplies  
Output voltage 12 or 24 V DC

# 7M / 7E 시리즈 스마트 전력량계

## 7M.38 시리즈

다기능 양방향 전력량계

LCD 백라이트 화면

3선 및 4선 시스템 및 단상 응용

최대 80 A @ 70 °C까지 직결

MID 인증 획득



Finder Toolbox



최대 80A까지 직결이 가능하며,  
스마트 폰 NFC 기능으로 설정과 데이터 확인이 가능합니다 - Android or iOS.  
네트워크 환경 없이도, NFC로 에너지 측정값을 읽을 수 있습니다.

- 총전력 또는 부분 전력소비량 표시: kWh, kVAh, kvarh
- 실시간 측정값 표시: V, A, PF, kW, kVA, kvar, Hz, THD V, THD A, 위상각, 전력 흐름 방향
- M-Bus 및 Modbus RS485 인터페이스 내장
- 다기능 터치 버튼으로 직관적인 조작
- 유효전력량 오차: 1% [EN 50470-3 (MID) 기준]
- 무효전력량 오차: 2% (EN 62053-23 기준)
- 봉인형 변조 방지 단자 커버 포함

	7M.38.8.400.0112	7M.38.8.400.0212	7M.38.8.400.0312
NFC Interface	✓	✓	✓
<b>Output specification (S0+ / S0-)</b>			
Number/Type	2 opto-isolated outputs	1 opto-isolated output	1 opto-isolated output
Pulses per kWh	500	500	500
Imp/kWh			
<b>Communication protocol</b>			
Bus System	—	Modbus RS485	M-Bus
Baud rate	—	1200...115200	300...9600
Baud			
<b>Technical data</b>			
Accuracy class	B/2	B/2	B/2
IEC EN 50470-3 / IEC EN 62053-23			

컴팩트형 MID 인증 단상·삼상 전력량계로, 가정용부터 산업용까지 다양한 현장에서의 에너지 측정에 적합합니다. EN 50470-3 규격(1% 오차율)을 충족하며, S0, Modbus, M-Bus, Ethernet TCP/IP 통신 포트를 기본 탑재하고 있습니다.

### 3-상 제품군

삼상 모델은 최대 80A까지 직결 가능하며, CT를 사용하면 더 높은 전류에도 대응할 수 있습니다. 양방향 전력 흐름 측정이 가능하며, 활성·무효·피상전력, 주파수, 상순, 전압·전류 등 다양한 전기 파라미터를 표시하고 전송합니다.



#### 7E.78.8.400.0112

- 80 A / 400 V AC
- S0 interface
- Dual tariff
- MID certified

#### 7E.78.8.400.0212

- 80 A / 400 V AC
- Modbus + S0 interface
- Dual tariff
- MID certified

#### 7E.78.8.400.0312

- 80 A / 400 V AC
- M-Bus + S0 interface
- Dual tariff
- MID certified

#### 7E.78.8.400.0410

- 80 A / 400 V AC
- Ethernet Modbus TCP + S0 interface
- MID certified



#### 7E.86.8.400.0112

- 6 A / 400 V AC
- S0 interface
- Up to 50 000 A using current transformer
- Dual tariff
- MID certified

#### 7E.86.8.400.0212

- 6 A / 400 V AC
- Modbus + S0 interface
- Up to 50 000 A using current transformer
- Dual tariff
- MID certified

#### 7E.86.8.400.0312

- 6 A / 400 V AC
- M-Bus + S0 interface
- Up to 50 000 A using current transformer
- Dual tariff
- MID certified

#### 7E.86.8.400.0410

- 6 A / 400 V AC
- Ethernet Modbus TCP + S0 interface
- Up to 50 000 A using current transformer
- MID certified

## 전력 분석계 (6M 시리즈)



### 6M 시리즈 - Power analyzer products

- For DC system and single phase AC TRMS measurements from 1...400 Hz
- Bi-directional energy measurement: kWh
- Instantaneous values measured:  
V (RMS), A (RMS), PF, kW, kVA, kvar, Hz, THD (I), Vpk, Ipk, Cosφ
- Modbus RS485 communication port
- Free software for settings via modbus

50 A  
100 A  
300 A

Single phase power analyzer products able to make TRMS AC and DC measurements and Gateway Modbus TCP IP to Modbus RTU (RS485 master) with on board web server



## ■ 태양광용 – Type 1+2 SPD

- PV 시스템용 Type 1+2 SPD
- 컴팩트한 구조로 최대 12.5 kA의 방전용량 지원
- 설치 방향에 구애받지 않는 장착 방식 (Upside-down)
- 최대 1500 V DC ( $U_{CPV}$ ) 까지 가능



7P.13.9.000.1006

- PV SPD Type 1+2
- Y connection
- $U_{CPV} = 1050$  V DC
- $I_{imp} = 6.25$  kA (single pole) -
- $I_n = 20$  kA
- $I_{max} = 40$  kA



7P.13.9.500.1006

- PV SPD Type 1+2
- Y connection
- $U_{CPV} = 1500$  V DC
- $I_{imp} = 6.25$  kA (single pole) -
- $I_n = 20$  kA
- $I_{max} = 40$  kA

## ■ 태양광용 – Type 2 SPD

750 ~ 1500 V DC ( $U_{CPV}$ ) 인  
태양광용 SPD



x = optional remote  
connector

7P.23.9.750.x020

- PV SPD Type 2
- $U_{CPV} = 750$  V DC
- $I_n = 20$  kA
- $I_{max} = 40$  kA

7P.23.9.000.x015

- PV SPD Type 2
- $U_{CPV} = 1020$  V DC
- $I_n = 15$  kA
- $I_{max} = 40$  kA

7P.23.9.500.x015

- PV SPD Type 2
- $U_{CPV} = 1500$  V DC
- $I_n = 15$  kA
- $I_{max} = 40$  kA

## ■ AC 및 EV 충전용 – Type 1+2 SPD

일반 AC 시스템 및 전기차  
충전용 SPD이며, 최대 50 kA ( $I_{imp}$ )  
높은 방전 전류를 제공합니다.  
각 모듈은 고에너지 바리스터와  
고성능 가스 스파크 갭 (GDT)을  
결합한 구조입니다.



7P.02.8.275.1012

- SPD Type 1+2 for  
단상시스템용 TT (TN-S)

7P.04.8.275.1012

- SPD Type 1+2  
3상 시스템용 (TN-S)

7P.05.8.275.1012

- SPD Type 1+2  
3상 시스템용 TN



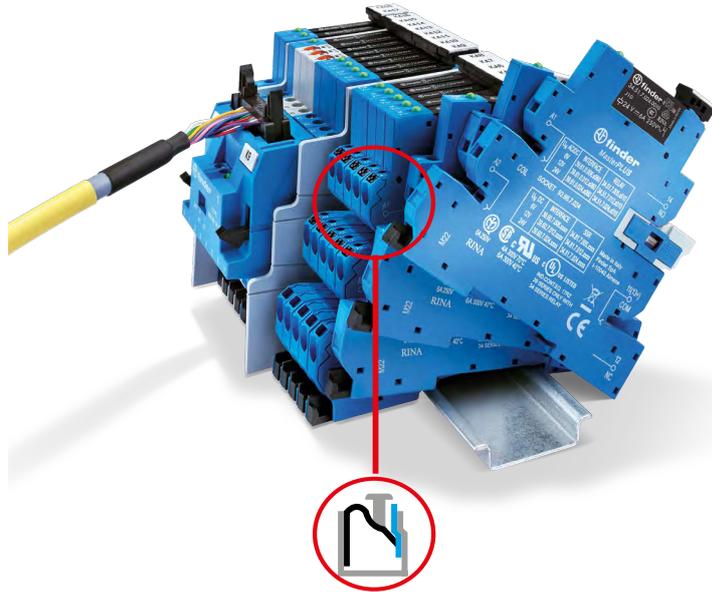
Ultra-slim



Simple



Versatile



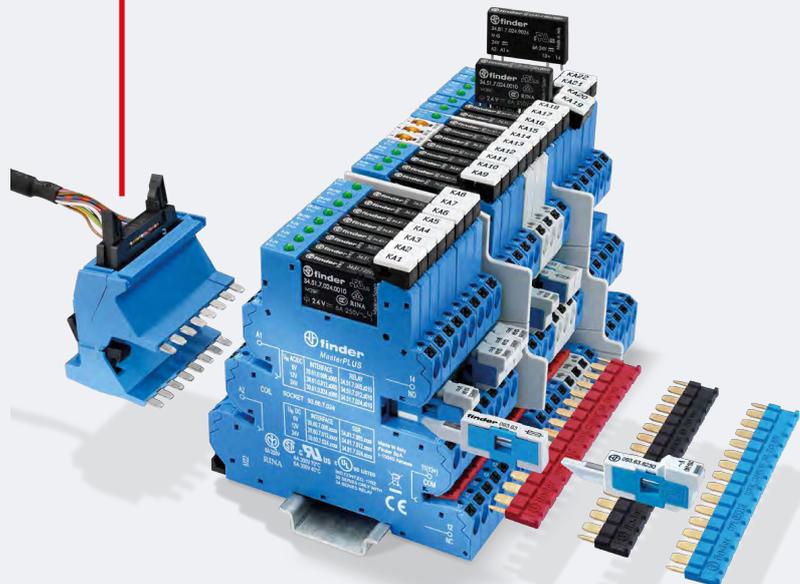
FINDER의 PLC 인터페이스 모듈은 폭 6.2mm의 공간 절약형 솔루션이며, 다양한 소켓과 액세서리 조합이 가능합니다.

## MasterADAPTER

Type 093.68.14.1

MasterADAPTER를 사용하면, 최대 8개의 MasterINTERFACE 내, A1/A2 단자를 14핀 케이블로 PLC 출력에 쉽게 연결할 수 있으며, 2선식 전원 연결도 간편합니다.

- 코일 상태 및 보호 회로 내장
- 플라스틱 클립을 통한 안전한 고정과 탈거
- DIN Rail 마운팅 (EN 60715)



Features	Rated current	No. of contacts
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### 50 시리즈 - 안전릴레이 (EN 61810-3)

- DC coil
- PCB Relay with forcibly guided contacts according to EN 61810-3 Type A and Type B
- High physical separation between adjacent contacts
- 8 mm, 6 kV (1.2/50 μs) isolation, coil - contacts
- Flux proof: RT II and RT III

	3 NO + 3 NC
	2 CO
8 A	2 NO + 2 NC
	3 NO + 1 NC
	4 NO + 2 NC
	5 NO + 1 NC



### 75 시리즈 - 강제 안내접점 릴레이 모듈

- AC or DC coils
- Extended operating range (0.7...1.25)U<sub>N</sub>
- For safety applications, with class A forcibly guided contacts (EN 61810-3)
- For railway applications; materials compliant with fire and smoke characteristics (EN 45545-2:2016); mechanical and climatic characteristics compliant with EN 61373 and EN 50155
- SIL 2 and SIL 3 compliant according to IEC 61508
- Coil status visual indication with LED
- 35 mm rail (EN 60715) mount

	1 NO + 1 NC
	5 NO + 1 NC
6 A	2 NO + 2 NC
10 A	3 NO + 1 NC
	4 NO + 2 NC
	2 NO + 1 NC

Features	Rated current	No. of contacts
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### 77 시리즈 - 모듈러 SSR (Solid State Relays)

- Input control circuit AC/DC
- Output switching control circuit, AC or DC specification: 230 V AC or 400 V AC output; 24 V DC or 125 V DC
- Rated AC switching voltage: (19...305)V AC or (48...480)V AC
- Rated DC switching voltage: (16...32)V DC or (85...140)V DC
- Zero-crossing and random switch-on versions
- Suitable for lamp loads, high switching speed
- 17.5 and 22.5 mm housing
- DC output version

5 A	1 SSR
7 A	
15 A	
25 A	
30 A	



### 77 시리즈 - "하키 픽" SSR (Solid State Relays)

- For single-phase, two-phase and three-phase systems
- Single-phase version up to 125 A with hinged terminal covers
- Two-phase version with 2 independent output channels controlled by independent DC inputs
- Mounting on heat sink or directly on metal cabinet
- High switching speed and electrical life
- Silent switching, without arcing and bounces
- Low absorption input circuit
- Version available with "Zero-crossing" switching
- Version available with "Random" switching

25 A	1 SSR
40 A	
50 A	
60 A	
75 A	
80 A	
100 A	
125 A	2 SSR
	3 SSR



Features	Rated current	No. of contacts	Sockets
 <p><b>30 시리즈 -Subminiature DIL relays</b></p> <ul style="list-style-type: none"> <li>- 2 Pole changeover contacts</li> <li>- Low level switching capability</li> <li>- Subminiature: - industry standard DIL package</li> <li>- Sensitive DC coil: 200 mW</li> <li>- Wash tight: RT III</li> </ul>	2 A	2 CO	
 <p><b>32 시리즈 -Subminiature PCB relays</b></p> <ul style="list-style-type: none"> <li>- 1 Pole changeover contacts or 1 Pole normally open contact</li> <li>- Subminiature, low profile package</li> <li>- Sensitive DC coil: 200 mW</li> <li>- Wash tight: RT III</li> </ul>	6 A	1 CO 1 NO	
 <p><b>34 시리즈 -Ultra-slim Electromechanical PCB relays</b></p> <ul style="list-style-type: none"> <li>- Sensitive DC coil: 170 mW</li> <li>- 5 mm wide</li> <li>- 6 kV (1.2/50 <math>\mu</math>s) isolation, coil - contacts</li> </ul>	6 A	1 CO 1 NO	<b>93 시리즈</b> 
 <p><b>34 시리즈 -Ultra-slim Solid State PCB relays</b></p> <ul style="list-style-type: none"> <li>- Sensitive DC input circuits</li> <li>- 5 mm wide</li> <li>- Silent, high speed switching with long electrical life</li> </ul>	0.1 A 0.2 A 2 A 6 A	1 output (SSR)	
 <p><b>36 시리즈 -Miniature PCB relays</b></p> <ul style="list-style-type: none"> <li>- 1 Pole changeover contacts</li> <li>- Miniature "Sugar Cube" package</li> <li>- Sensitive DC - 360 mW</li> <li>- Wash tight: RT III</li> </ul>	10 A	1 CO	
 <p><b>40 시리즈 -Miniature PCB/plug-in relays</b></p> <ul style="list-style-type: none"> <li>- DC coils 500 or 650 mW (standard or sensitive) &amp; AC coils</li> <li>- 3.5 mm or 5.3 mm pin pitch</li> <li>- 8 mm, 6 kV (1.2/50 <math>\mu</math>s) isolation, coil - contacts</li> <li>- Flux proof: RT II standard</li> </ul>	8 A 10 A 12 A 16 A	1 CO 1 NO 2 CO 2 NO	<b>95 시리즈</b> 
 <p><b>41 시리즈 -Low profile electromechanical PCB relays</b></p> <ul style="list-style-type: none"> <li>- Low profile, 15.7 mm height</li> <li>- DC coils: 400 mW</li> <li>- 8 mm, 6 kV (1.2/50 <math>\mu</math>s) isolation, coil - contacts</li> <li>- Flux proof: RT II standard, (RT III option)</li> </ul>	12 A 16 A 8 A	1 CO 1 NO 2 CO	<b>93 시리즈</b> 
 <p><b>41 시리즈 -Low profile Solid State PCB relays</b></p> <ul style="list-style-type: none"> <li>- Low profile, 15.7 mm height</li> <li>- Sensitive DC input circuits</li> <li>- Silent, high speed switching with long electrical life</li> </ul>	3 A 5 A	1 output (SSR)	<b>95 시리즈</b> 
 <p><b>43 시리즈 -Low profile PCB relays</b></p> <ul style="list-style-type: none"> <li>- Low profile, 15.4 mm height</li> <li>- Sensitive DC coils: 250 mW or 400 mW</li> <li>- Very high coil contact isolation 10 mm, 6 kV (1.2/50 <math>\mu</math>s)</li> <li>- Flux proof: RT II standard, (RT III option)</li> <li>- 3.2 or 5 mm pin pitch</li> </ul>	10 A 16 A	1 CO 1 NO	<b>95 시리즈</b> 
 <p><b>45 시리즈 -Miniature PCB relays</b></p> <ul style="list-style-type: none"> <li>- Sensitive DC coil - 360 mW</li> <li>- Relay for +125 °C ambient use</li> <li>- Contact gap <math>\geq</math> 3 mm/<math>\geq</math> 3.6 mm according to EN 60730-1</li> <li>- 8 mm, 6 kV (1.2/50 <math>\mu</math>s) isolation, coil - contacts</li> <li>- PCB mounting + Faston 250</li> </ul>	10 A 16 A 16 A	1 NO 1 NO 1 NC (only 45.71)	

Features	Rated current	No. of contacts	Sockets
 <p><b>46 시리즈 -Miniature industrial relays</b></p> <ul style="list-style-type: none"> <li>- DC coils, 500 mW or AC coils, 1.2 VA</li> <li>- Socket mount or direct connection via Faston connectors</li> <li>- Available with lockable test button, mechanical flag &amp; LED indicator</li> <li>- 8 mm, 6 kV (1.2/50 μs) isolation, coil - contacts</li> </ul>	16 A 8 A	1 CO 2 CO	97 시리즈 
 <p><b>55 시리즈 -General purpose relays</b></p> <ul style="list-style-type: none"> <li>- AC &amp; DC coils</li> <li>- PCB or Plug-in mounting</li> <li>- Available with lockable test button, mechanical flag &amp; LED indicator</li> <li>- Special version for railway application</li> </ul>	10 A 7 A	2 CO 3 CO 4 CO	94 시리즈 
 <p><b>56 시리즈 -Miniature power relays</b></p> <ul style="list-style-type: none"> <li>- AC &amp; DC coils</li> <li>- PCB or Plug-in mounting</li> <li>- Flange mount option (Faston 187 termination)</li> <li>- Available with lockable test button, mechanical flag &amp; LED indicator</li> </ul>	12 A	2 CO 2 NO 4 CO	96 시리즈 
 <p><b>60 시리즈 -General purpose relays</b></p> <ul style="list-style-type: none"> <li>- AC &amp; DC coils, including "current sensing" versions</li> <li>- 8 &amp; 11 pin plug-in</li> <li>- Flange mount</li> <li>- Available with lockable test button, mechanical flag &amp; LED indicator</li> <li>- Version with bifurcated contacts for low level switching</li> </ul>	6 A 10 A	2 CO 3 CO	90 시리즈 
 <p><b>62 시리즈 - Power relays</b></p> <ul style="list-style-type: none"> <li>- AC &amp; DC coils</li> <li>- PCB mount or Plug-in mount (Faston 187) or Flange mount (Faston 250)</li> <li>- NO contacts options, &gt; 3 mm contact gap</li> <li>- LED, mechanical indicator &amp; test button options</li> <li>- Magnetic blow version</li> </ul>	16 A	2 CO 2 NO 3 CO 3 NO	92 시리즈 
 <p><b>65 시리즈 - Power relays</b></p> <ul style="list-style-type: none"> <li>- AC &amp; DC coils</li> <li>- PCB mount or Flange mount (Faston 250)</li> <li>- NO version, &gt; 3 mm contact gap</li> </ul>	20 A 30 A	1 NO + 1 NC 1 NO	
 <p><b>66 시리즈 - Power relays</b></p> <ul style="list-style-type: none"> <li>- AC &amp; DC coils</li> <li>- PCB mount or Flange mount (Faston 250)</li> <li>- 8 mm, 6 kV (1.2/50 μs) isolation, coil - contacts</li> <li>- Version ATEX and HazLoc compliant available</li> </ul>	30 A	2 CO 2 NO	
 <p><b>67 시리즈 - High Power relay</b></p> <ul style="list-style-type: none"> <li>- DC coils, with only 170 mW holding power</li> <li>- Contact gap ≥ 3 mm/≥ 5.2 mm (according to VDE 0126-1-1, EN 62109-1, EN 62109-2)</li> <li>- Reinforced insulation between coil and contacts</li> <li>- 1.5 mm gap between PCB and relay base</li> <li>- Suitable for use at ambient temperatures up to 85 °C (with energy-saving coil energization) or 70 °C (with standard coil energization)</li> </ul>	50 A	2 NO 3 NO	
 <p><b>68 시리즈 - High Power relay</b></p> <ul style="list-style-type: none"> <li>- Contact gap ≥ 3.6 mm (according to VDE 0126-1-1, EN 62109-1, EN 62109-2)</li> <li>- DC coils, with only 700 mW holding power</li> <li>- Reinforced insulation between coil and contacts</li> <li>- Suitable for use at ambient temperatures up to 85 °C</li> <li>- Meets the EN 60335-1 requirements of resistance to heat and fire (GWIT 775 °C and GWFI 850 °C)</li> </ul>	32 A 40 A 100 A	2 NO 2 NO + 1 NC 4 NO 4 NO + 1 NC	
 <p><b>6K 시리즈 - Industrial contactors</b></p> <ul style="list-style-type: none"> <li>- AC &amp; DC coils</li> <li>- From 4 up to 37 kW AC3</li> <li>- NC auxiliary contact in "mirror contact" configuration according to EN 60947-4-1</li> <li>- Auxiliary block contact 2 A AC15 available</li> <li>- 35 mm rail (EN 60715) mount</li> </ul>	9 A 10 A 12 A 18 A 24 A 32 A 50 A 74 A	3 NO + 1 NC 3 NO + 1 NO 4 NO 3 NO	

Features	Rated current	No. of contacts
 <p><b>38 시리즈 - Relay interface modules</b></p> <ul style="list-style-type: none"> <li>- DC, AC or AC/DC coil versions</li> <li>- 6.2 mm or 14 mm wide</li> <li>- Special coil / input leakage current suppression types</li> <li>- Screw &amp; screwless terminals</li> </ul>	6 A	1 CO
	16 A	
	8 A	2 CO
	0.1 A	1 SSR
	2 A	
 <p><b>39 시리즈 - MasterINTERFACE - Relay interface modules</b></p> <ul style="list-style-type: none"> <li>- DC, AC or AC/DC coil versions</li> <li>- 6.2 mm wide</li> <li>- Electromechanical relays (EMR) or solid state relays (SSR)</li> <li>- <b>MasterBASIC</b> for general use in any type of system available ATEX compliant version</li> <li>- <b>MasterPLUS</b> accepts the output fuse module, for the easy and space efficient protection of output circuits</li> <li>- <b>MasterINPUT</b> and <b>MasterOUTPUT</b> for the quick and easy distribution of supply voltage to proximity switches, electromagnetic valves</li> <li>- <b>MasterTIMER</b> slim and multifunction timed interface modules with EMR and SSR, 8 functions, 4 time scales</li> <li>- Push-in and box clamp</li> <li>- Version ATEX and HazLoc compliant available</li> </ul>	6 A	1 CO
	0.1 A	
	2 A	1 SSR
	6 A	
 <p><b>48 시리즈 - Relay interface modules</b></p> <ul style="list-style-type: none"> <li>- AC or DC coils</li> <li>- 15.8 mm wide</li> <li>- Instant ejection of relay using plastic retaining clip</li> <li>- Supply status indication and EMC coil suppression module as standard</li> <li>- Push-in and box clamp</li> <li>- Version with forcibly guided contacts</li> </ul>	10 A	1 CO
	16 A	
	10 A	2 CO
	8 A	
 <p><b>4C 시리즈 - Relay interface modules</b></p> <ul style="list-style-type: none"> <li>- AC or DC coils</li> <li>- 15.8 mm wide</li> <li>- Instant ejection of relay using plastic retaining clip</li> <li>- Supply status indication and EMC coil suppression module as standard</li> <li>- Push-in and box clamp</li> <li>- Mechanical indicator &amp; test button</li> </ul>	10 A	1 CO
	16 A	
	8 A	2 CO
 <p><b>58 시리즈 - Relay interface modules</b></p> <ul style="list-style-type: none"> <li>- AC or DC coils</li> <li>- 27 mm wide</li> <li>- Instant ejection of relay using plastic retaining clip</li> <li>- Supply status indication and EMC coil suppression module as standard</li> <li>- Push-in and box clamp</li> <li>- Mechanical indicator &amp; test button</li> <li>- Version ATEX and HazLoc compliant available</li> </ul>	10 A	2 CO
		3 CO
	7 A	4 CO



**19 시리즈 - 수동 및 강제 제어 모듈**

- Clear indication of the signal or equipment status
- Easy to operate selection switches and potentiometers
- Feedback contact; signals when switch is not in "Auto" position
- Compact housing: width 11.2, 17.5 o 70 mm

- Auto/Off/On output module, 11.2 mm
- Analogue override module (0...10)V
- Power relay module



철도 차량에 사용되는 릴레이는 점점 더 엄격해지는 기술적 요구사항을 충족해야 하며, 이는 넓은 동작범위, 충격 및 진동에 대한 높은 내구성, 폭넓은 온도 및 습도 범위에서의 안정적인 동작, 그리고 무엇보다 릴레이를 구성하는 부품의 우수한 내화(耐火)특성을 포함합니다.

### 철도차량용 방화/방연 재질 적용

당사 철도차량용 릴레이, 타이머 및 컨택터는 철도 차량용 화재안전기준(EN 45545-2, EL10)을 준수할 수 있도록, 난연 특성이 확보된 특수 재질을 적용하여 제조되었습니다.

해당 요구사항은 위험도 등급 HL1부터 HL3 까지 EN 60695에 따른 V0 등급 적합성을 의미합니다.

### 기계적 및 환경 특성

당사 철도차량용 제품들은 EN 61373 규격의 Category 1, Class B 요구사항을 충족하여, 철도 환경에서 발생하는 랜덤 진동 및 충격에 대한 내구성을 확보하고 있습니다. 또한 온도 및 습도 조건에 대해서는 EN 50155의 OT4/ST1 요구사항을 충족합니다.



Used by



- 출입문 통제 시스템
- 신호 통제
- 내·외부 조명 시스템
- 컨트롤 보드
- 냉난방 및 공조
- 열차 운행 관리



<p>41 시리즈</p> 	<p>- IECEx, ATEX (II 3 G Ex nC IIC Gc) - HazLoc Class I, Zone 2, AEx nC IIC Gc - HazLoc Class I, Div. 2, Groups A, B, C, D - T4</p>    <p>HazLoc</p>	<p><b>Low profile (15.7 mm height) PCB relays</b>  <b>Type 41.52</b> - 2 Pole 8 A (5.0 mm pin pitch)          2 CO (DPDT) - 2 NO (DPST-NO)  <b>Type 41.61</b> - 1 Pole 16 A (5.0 mm pin pitch)          1 CO (SPDT) - 1 NO (SPST-NO)          - DC coils, from 5 to 110 V DC          - 8 mm, 6 kV (1.2/50 <math>\mu</math>s) isolation, coil-contacts</p>
<p>66 시리즈</p> 	<p>- ATEX (II 3 G Ex ec nC IIC Gc) - HazLoc Class I, Div. 2, Groups A, B, C, D - T4 - T5 - T6</p>   <p>HazLoc</p>	<p><b>Power relays</b>  <b>Type 66.82</b> - 2 Pole 30 A          - 2 CO (DPDT) or 2 NO (DPST-NO)          - Faston 250 connections          - Nominal voltage: 6 to 240 V AC or 6 to 125 V DC   <b>Type 66.22(S)</b> - 2 Pole 25 A          - 2 CO (DPDT) or 2 NO (DPST-NO)          - PCB mount          - Nominal voltage: 6 to 125 V DC</p>
<p>83.02.0.240.0003</p> 	<p>- IECEx, ATEX (Ex ec nC IIC T4 Gc) - HazLoc Class I, Div. 2, Groups A, B, C, D - T4 - HazLoc Class I, Zone 2, AEx ec nC IIC T4 Gc</p>    <p>HazLoc</p>	<p><b>Modular timers - IECEx - ATEX - HazLoc</b>          - 22.5 mm multi-function timer          - 2 CO (DPDT) output contact          - 10 A 277 V AC / 5 A 32 V DC          - Multi-voltage supply: 24...240 V AC/DC          - 8 functions with or with or without control signal          - 0.05 s to 10 day time range          - External time setting potentiometer option</p>
<p>39.1x.x.xxx.0073 Box clamp 39.0x.x.xxx.0073 Push-in terminal</p> 	<p><b>39.11 - 39.01 EMR</b> - ATEX (II 3G Ex ec nC IIC Gc) - HazLoc Class I, Div. 2, Groups A, B, C, D - T5 - T6   <b>39.10 - 39.00</b> - Solid State Relay (SSR) - HazLoc Class I, Div. 2, Groups A, B, C, D - T5 - T6</p>   <p>HazLoc</p>	<p><b>Relay interface module</b>          - 1 CO (SPDT)          - 6 A 250 V AC / 6 A 24 V DC          - Nominal voltage: 6 to 240 V AC/DC              6 to 24 V DC              230 V AC          - Integral coil indication          - Multivoltage version</p>
<p>39.x1.x.xxx.0073 Box clamp 39.x0.x.xxx.0073 Push-in terminal</p> 	<p><b>39.81 - 39.91 - EMR</b> - ATEX (II 3G Ex ec nC IIC Gc) - HazLoc Class I, Div. 2, Groups A, B, C, D - T5 - T6   <b>39.80 - 39.90</b> - Solid State Relay (SSR) - HazLoc Class I, Div. 2, Groups A, B, C, D - T5 - T6</p>   <p>HazLoc</p>	<p><b>Slim timed interface module</b>          - 1 CO (SPDT)          - 6 A 250 V AC / 6 A 24 V DC          - Nominal voltage: 12 and 24 V AC/DC          - Timer adjustment via top mounted rotary knob with integral coil indication - accessible after assembly          - Multi-function          - DIP-switch for selection from:              - 8 functions              - 4 time scale: from 0.1s to 6h</p>
<p>58 시리즈</p> 	<p>- IECEx - ATEX: II 3G Ex ec nC IIC Gc - HazLoc Class I, Div. 2, Groups A, B, C, D - T5</p>    <p>HazLoc</p>	<p><b>Relay interface modules</b>          - 2 CO (DPDT) 10 A 250 V AC          - 3 CO (3PDT) 8.5 A 250 V AC          - 4 CO (4PDT) 6 A 250 V AC          - Coil nominal voltage: 12 to 125 V DC              12 to 230 V AC          - Supply status indication as standard          - Box clamp and Push-in terminal available</p>
<p>86 시리즈</p> 	<p>- ATEX (II 3G Ex ec IIC Gc) - HazLoc Class I, Div. 2, Groups A, B, C, D - T6</p>   <p>HazLoc</p>	<p><b>Timer modules for use in conjunction with Relay interface module 58 Series ATEX versions</b>          - DIP-switch for selection 2 functions:              AI: ON-Delay, DI: Interval          - DIP-switch for selection 7 time scale:              from 0.05s to 100h          - LED indicator          - Plug-in mount</p>

## 3상용 전자식 전압감시 릴레이

### 70.42 시리즈

다기능형으로 저전압·과전압·역상, 결상, 비대칭, 중성선 단락 등 다양한 전압 상태를 모니터링할 수 있습니다.

Approvals (according to type)



### 특장

- 2 CO 릴레이 출력, 8 A
- 안전 논리회로 - 릴레이가 오류를 감지하면, 출력 점등 오픈
- 모든 기능과 설정값은 전면의 선택버튼 및 트리머로 용이하게 조정
- 컬러 LED를 통한 명확하고 즉각적인 시각적 표시
- 모듈형 하우징, 폭 35 mm
- DIN 레일 마운팅 형

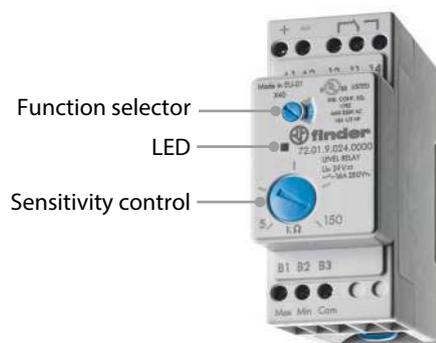
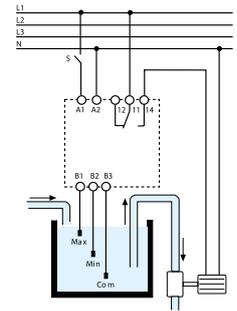
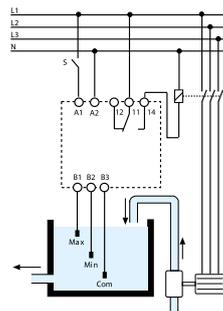
## 레벨 제어 릴레이

### 72 시리즈

전도성 액체의 액면 제어.

두 개의 전극봉을 이용한 단면 제어 또는 3개의 전극봉을 사용한 최저/최고 수위 제어

- 급수 또는 배수 기능 선택
- 단일 레벨 제어 또는 Min./Max. 제한
- 운전상태에 대한 LED 표시등
- 1 CO (SPDT) 16 A - 250 V AC
- 접점 신호 출력
- 정격 전압 AC or DC
- 5V, 1mA의 저부하 운전 가능한 특수 시방 제공
- 전원공급/컨택/전극봉 사이의 강화된 절연저항 (6 kV - 1.2/50 μs)
- 35 mm DIN rail (EN 60715) 설치



	Features*	Rated current	Function
	<b>70 시리즈 - 상감시 릴레이 (Phase Monitoring)</b> <ul style="list-style-type: none"> <li>- 1 or 3 phase systems</li> <li>- 1 or 2 contacts</li> <li>- Adjustable or Fixed values</li> <li>- Positive safety logic</li> <li>- Colored LEDs for clear &amp; immediate visual indication</li> <li>- NFC version</li> <li>- Modular housing, 17.5, 22.5 or 35 mm wide</li> </ul>	6 A 8 A 10 A	<ul style="list-style-type: none"> <li>• Voltage monitoring</li> <li>• Current monitoring</li> <li>• Thermistor control with PTC</li> </ul>
	<b>72 시리즈 - 레벨 제어 릴레이</b> <ul style="list-style-type: none"> <li>- Sensitivity adjustable 150 kΩ, 450 kΩ or fixed 150 kΩ</li> <li>- Electrode and Electrode holder</li> <li>- Delay time (0.5 s or 7 s) or fixed (1 s)</li> <li>- 1 contact, 17.5 or 35 mm wide</li> </ul>	6 A 16 A	<b>Level control (Emptying or Filling) Windows mode</b>
	<b>72 시리즈 - 플로트 및 플로트 스위치</b> <ul style="list-style-type: none"> <li>- Suitable for emptying and filling</li> <li>- 1 CO, 10 A/250 V AC (<math>\cos\phi = 1</math>)</li> <li>- Cable length 5 m, 10 m, 15 m or 20 m</li> <li>- H07 RN F cable approved TÜV</li> <li>- Cable and plastic ACS certified available version</li> </ul>	10 A	<b>Float switches suitable for level regulation in grey or black water systems, drainage plants and pump systems</b>
	<b>72 시리즈 - 순차기동 릴레이</b> <ul style="list-style-type: none"> <li>- 2 independent NO outputs, relay for alternating loads 12 A</li> <li>- 4 functions</li> <li>- 2 independent control signals</li> <li>- Modular housing, 35 mm wide</li> </ul>	12 A	<b>Special relay for alternating loads; for applications with pumps, compressors, air conditioning or refrigeration units</b>

	Features	Rated current	No. of contacts	Sockets
	<b>RB 시리즈 - 래칭 릴레이 모듈</b> <ul style="list-style-type: none"> <li>- DC voltage</li> <li>- 2 coil type</li> <li>- SET and RESET signals</li> <li>- 35 mm rail (EN 60715) mount</li> <li>- Pin socket type 90.21 mount</li> </ul>	8 A	2 CO 4 CO	<b>90 시리즈</b> 
	<b>RR 시리즈 - 고속 릴레이 모듈</b> <ul style="list-style-type: none"> <li>- DC voltage</li> <li>- Operate time <math>\leq 3</math> ms</li> <li>- LED command status indication</li> <li>- 35 mm rail (EN 60715) mount</li> <li>- Pin socket type 90.21 mount</li> </ul>	8 A	4 CO 3 NO + 1 CO	<b>90 시리즈</b> 
	<b>99 시리즈 - 코일 상태 표시 및 EMC 제거 모듈</b> <ul style="list-style-type: none"> <li>- Depending on module selected, they can provide;</li> <li>- Suppression of coil back emf on switch-off</li> <li>- LED indication to show when the coil in energized</li> <li>- Protection against reverse polarity applied across the coil terminals</li> <li>- By-pass of troublesome leakage currents in the coil circuit</li> </ul>	—	—	

## 산업 전장 패널용 온습도 조절기 및 액세서리

7T 시리즈 - 온·습도 조절기

7F 시리즈 - 필터 내장형 팬

7H 시리즈 - UL 인증 판넬 히터

7L 시리즈 - LED 판넬 라이트

7U 시리즈 - 모듈형 파워 아웃렛

9D 시리즈 - 고전류 집전·배전 터미널

8\_ 시리즈 - 다양한 모듈러 타이머





### 7T 시리즈 - 판넬용 온도·습도 제어기

- Small, compact size (17.5 mm wide)
- Snap action thermostatic Bimetal sensor
- Wide temperature setting range
- Long electrical life

10 A Heating control  
Ventilation control



### 7F 시리즈 - 필터 내장형 팬

- Very low acoustic noise
- Air volume (24...700)m<sup>3</sup>/h (free flow)
- Power consumption: (4...130)W
- Operating voltage: 120 or 230 V AC (50/60 Hz) or 24 V DC
- Black colour available

Filter fans for electrical cabinets  
and enclosures  
— Exhaust filters  
For Indoor or Outdoor  
applications



### 7H 시리즈 - UL인증 판넬 히터

- Heating power 25 - 50 - 100 or 150 W
- Heating power 250 or 400 W fan assisted
- Nominal voltage 110...230 V AC/DC, 120 or 230 V AC
- PTC self-regulating heating system
- Aluminium profile encased in a plastic housing
- Clip for 35 mm rail (EN 60715) mount

— Panel heaters for cabinets and  
switchboards



### 7L 시리즈 - LED 판넬 조명등

- Low power consumption
- Nominal voltage 12...48 or 110...240 V AC/DC
- Versions with direct switching, via ON/OFF switch or via integral movement detector
- Direct magnetic mounting or through a screw-fixed metallic support
- Light colour 5000 K
- Push-in terminals for the connection to a single unit
- Plug-in terminals for the connection to a single or multiple units

600 lumens  
1200 lumens LED light for electrical panels



### 7U 시리즈 - 제어반용 전원 콘센트

- Grey colour RAL 7035 (7U.0x-00x0)
- Yellow colour RAL 1021 (7U.0x-00x2)
- Available with or without voltage presence LED in socket
- Compatible with Schuko and Italian Bipasso, French System or American System
- Up to 16 A
- Panel or rail 35 mm (EN 60715) mounting

10 A  
16 A Socket for the cabinet



### 9D 시리즈 - 고전류 집전·배전 터미널 블럭

- Single, pole splitter: Split of main power input into 4, 6, 10 or 11 outputs
- Multiple, pole splitters: Splitting with increased number of outputs
- Grouping: Combining several inputs to make a single output (eg. solar applications)
- Reversible snap-on cover
- Ready to use Marking Kit (L1, L2, L3, N, PE, +, -) supplied with every block
- Rail 35 mm (EN 60715) mounting

80 A  
125 A  
175 A  
250 A  
400 A High current distribution  
terminal blocks for electrical  
panels



	Feature	Rated current	Function	Sockets
	<p><b>80 시리즈 - 모듈러 타이머</b></p> <ul style="list-style-type: none"> <li>- 6개의 시간 설정 범위 (0.1 s ~ 24 h)</li> <li>- Nominal voltage (12...240)V AC/DC</li> <li>- Contact rated current: 6, 8 or 16 A</li> <li>- Solid state output (SSR): 1 A</li> <li>- Version with NFC technology</li> <li>- 17.5 mm wide</li> </ul>	<p><b>1 A SSR*</b> <b>6 A</b> <b>8 A</b> <b>16 A</b></p>	<p><b>Multi-function Mono-function timers, NFC</b></p>	
	<p><b>81 시리즈 - 모듈러 타이머</b></p> <ul style="list-style-type: none"> <li>- 6개의 시간 설정 범위 (0.1 s ~ 10 h)</li> <li>- Seven functions (4 with supply start and 3 with signal start with Reset function)</li> <li>- Nominal voltage (12...230)V AC/DC</li> <li>- Reset function</li> <li>- 17.5 mm wide</li> </ul>	<p><b>16 A</b></p>	<p><b>Multi-function and multi-voltage timers</b></p>	
	<p><b>83 시리즈 - 모듈러 타이머</b></p> <ul style="list-style-type: none"> <li>- 8개의 시간 설정 범위 (0.05 s ~ 10일)</li> <li>- Nominal voltage (24...240)V AC/DC</li> <li>- Special version: 2 timed contacts or 1 timed + 1 instantaneous contact</li> <li>- External time setting potentiometer option pause function option</li> <li>- 22.5 mm wide</li> <li>- Version IECEx, ATEX and HazLoc compliant available</li> </ul>	<p><b>8 A</b> <b>10 A</b> <b>12 A</b> <b>16 A</b></p>	<p><b>Multi-function or Mono-function timers</b></p>	
	<p><b>84 시리즈 - SMARTimer</b></p> <ul style="list-style-type: none"> <li>- Two supply version available: 12...24 V AC/DC and 110...240 V AC/DC (not polarized)</li> <li>- Two programming modes: "Smart" mode via smartphone with NFC communication or "Classic" mode via the joystick</li> <li>- Flexibility: possible to create new specific functions, mixing the 30 available functions on each channel</li> <li>- High precision and possibility of choice in time set-up: time units; 0.1 seconds, seconds, minutes, hours</li> <li>- Two Independent programmable channels</li> </ul>	<p><b>16 A</b></p>	<p><b>Multi-function SMARTimer</b></p>	
	<p><b>85 시리즈 - 소형 플러그-인 타이머</b></p> <ul style="list-style-type: none"> <li>- 7개의 시간 설정 범위 (0.05 s ~ 100 h)</li> <li>- AC/DC supply non polarized</li> <li>- 2, 3 or 4 pole</li> </ul>	<p><b>7 A</b> <b>10 A</b></p>	<p><b>Multi-function timers</b></p>	<p><b>94 시리즈</b></p> 
	<p><b>86 시리즈 - 타이머 모듈</b></p> <ul style="list-style-type: none"> <li>- 시간설정 범위: 0.05 s ~ 100 h</li> <li>- Wide supply range in AC or DC coils</li> <li>- Plug-in sockets</li> <li>- Version ATEX and HazLoc compliant available</li> </ul>	<p>—</p>	<p><b>Multi-function or Bi-function timers</b></p>	<p><b>9x 시리즈</b></p> 
	<p><b>88 시리즈 - 플러그-인 / 판넬 전면 부착형</b></p> <ul style="list-style-type: none"> <li>- 시간설정 범위: 0.05 s ~ 300 h</li> <li>- Nominal voltage (24...230)V AC/DC or (12...240)V AC/DC</li> <li>- Version available with 2 timed contacts or 1 instantaneous + 1 timed</li> <li>- Front panel mounting fixing included</li> </ul>	<p><b>8 A</b></p>	<p><b>Multi-function or Mono-function Timers</b></p> <ul style="list-style-type: none"> <li>• Front panel mount</li> <li>• Socket mount</li> </ul>	<p><b>90 시리즈</b></p> 
	<p><b>93 시리즈 - 34 시리즈용 초박형 타이머 소켓</b></p> <ul style="list-style-type: none"> <li>- 4개의 시간설정 범위 (0.1 s ~ 6 h)</li> <li>- 8 functions</li> <li>- 12 or 24 V AC/DC supply</li> <li>- EMR and SSR relays</li> <li>- Screw and push-in terminal</li> </ul>	<p><b>2 A</b> <b>6 A</b></p>	<p><b>Multifunction timed interface module, 6.2 mm wide</b></p>	

\* SSR = Solid state output (1 NO)

## Features

## Description



### 10 시리즈 - 조도 반응 릴레이 (Pole 상단 또는 벽부형)

- 1 or 2 output contacts
- Sensitivity adjustment from 1 to 80 lux
- Italian Patent "Light feedback compensation" innovative principle compatible with slow starting gas discharge lamps (up to 10 minutes)
- Electronic circuit - transformer isolated
- Protection category IP 54

**Relays for automatic control of lighting according to the ambient light level;**  
**Rated current from 12 A up to 16 A**



### 11 시리즈 - 모듈러 타입 조도 반응 릴레이

- AC or AC/DC supply
- 1 or 2 output contacts
- Separate light sensor IP 54
- Integrated digital light dependent relay with time switch function
- Italian Patent "Light feedback compensation" innovative principle compatible with slow starting gas discharge lamps (up to 10 minutes)
- Lux threshold adjustable

**Switching on and off of lights depending on the ambient light sensor by external;**  
**Rated current from 12 A up to 16 A**



### 15 시리즈 - 디밍 제어기 (Dimmer)

- Modular, wall box or switch box versions
- Trailing Edge or Leading Edge dimming methods
- Master and Slave version (up to 32 Slaves per Master, with a maximum of 3200 W LED)
- Suitable for incandescent and halogen lighting loads (with or without transformer or electronic supply)
- Thermal protection against overload

**Dimmers for control of lighting levels. Power max from 50 W up to 500 W**



### 12 시리즈 - 타임 스위치

- Electromechanical or electronic version
- 1 or 2 output contacts
- Programming with smartphone with NFC and Bluetooth communication
- Power reserve for data maintain
- Power back-up
- Automatic adjustment for daylight saving

**Daily time switches Weekly time switches Digital "astro" switches.**  
**Rated current 16 A**



### 14 시리즈 - 전자식 계단 타이머

- AC Supply
- 1 NO output contact
- "Zero crossing" load switching
- Mono-function or Multi-functions
- Suitable for 3 or 4 wire systems
- Reset version for centralised switch OFF (Type 14.11)
- Maintenance function
- Version with Push-In terminals

**Electronic staircase timers.**  
**Rated current 10 A to 16 A**



### 1L 시리즈 - LED recessed emergency light "LUMOS" -

- Activation in the event of a power failure
- Nominal voltage: 230 V AC (50/60)Hz
- Rechargeable battery
- Battery run time 2.5 hours
- Complies with CEI 64-8
- Width 22.5 mm; depth 45.5 mm
- Recessed mount within switch box

**Recessed emergency light**



## Features

## Description



### 18 시리즈 - PIR 동작 감지기

- Wall mounting, surface mounting, recessed mounting
- External installations (IP 54/IP 55)
- High ceiling version
- Ambient light intervention threshold
- Light on time after last detection (versions up to 35 minutes)
- Version for installation in boxes e.g. 502-503

**Movement detectors.**  
**Rated current 10 A**

### 18 시리즈 - PIR 동작 및 재실 감지 센서

- Ceiling mounting
- 1 NO output contact
- Bluetooth version, DALI and KNX
- Fast configuration with Finder Toolbox App (Bluetooth version)
- Ambient light intervention threshold
- Light on time after last detection (versions up to 35 minutes)
- Push-in terminals



**Movement and presence detectors.**  
**Rated current 10 A**

## Features

## Description



### 22 시리즈 - 모듈러 모노스테이블 (단안정) 릴레이

- AC or DC coils
- Test button
- 1 or 2 output contacts; NO, NC contact configurations
- 17.5 mm wide

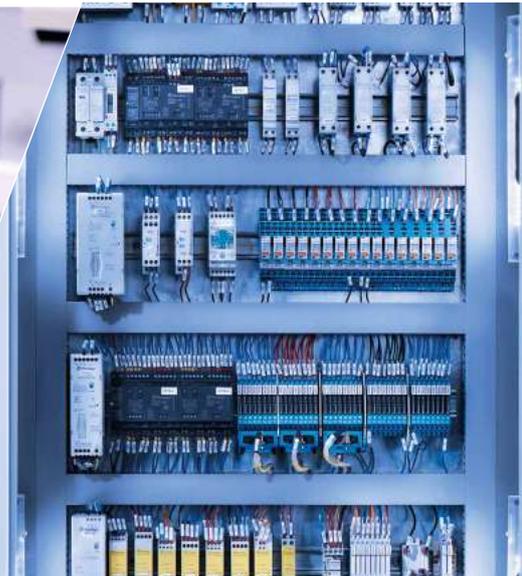
**Power interface.**  
**Rated current 20 A**

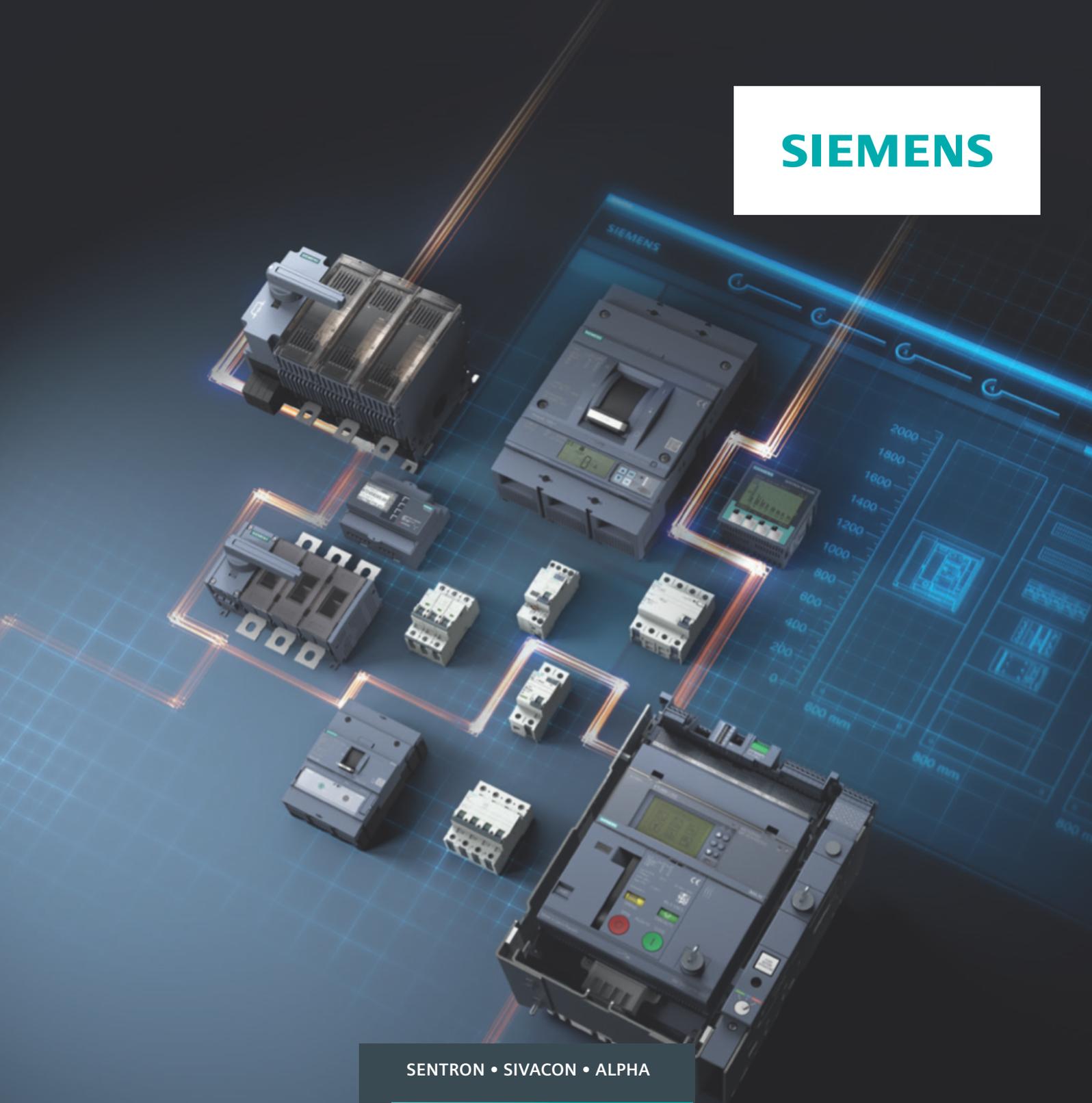


### 22 시리즈 - 모듈러 컨택터

- 2 or 4 contacts NO, NC, contacts configuration
- AC/DC silent coil (with varistor protection)
- Reinforced insulation (Protective separation between coil and contacts)
- Mechanical and LED indicators as standard
- Auto-On-Off selector version available
- Mirror contacts version available
- Auxiliary contact module (022.xx)
- 17.5, 35 or 53.5 mm wide

**Power interface.**  
**Rated current from 25 A up to 63 A**





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



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