

C O D I C O [®]

Relays & Accessories

ACTIVE COMPONENTS | **PASSIVE COMPONENTS** | CONNECTORS

POWER & SIGNAL RELAYS

Elektromechanische Relais von GOODSKY, SANYOU & NEXEM:

Leistungsrelais

Diese Produkte finden ihren Einsatz in der Industrie, der Gebäudetechnik, der Weißen Ware und im Bereich des Energiemanagements. Der Anwendungsbereich erstreckt sich für Schaltströme zwischen 3-40A, ein- und zweipoligen Bauformen mit Ansteuerung zwischen 170mW-1,6W. **Neu** im Portfolio sind Relais mit großem Kontaktabstand (1,5-3,0mm) für Anwendungen in der Photovoltaik bzw. EVSE. Die Bandbreite dieser Relais bewegt sich von 12-200A (ein- und zweipolige Ausführung).



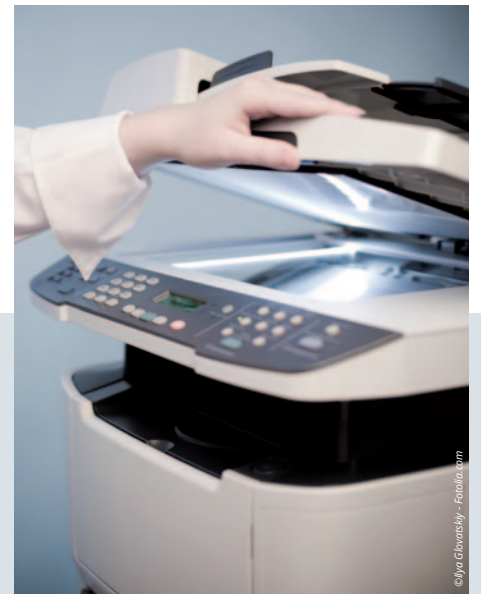
Schaltschrankrelais & Zubehör

Mit den Relais der Serien LR, EMI/EZ und RE und dem umfangreichen Zubehörprogramm bestehend aus Fassungen, Haltebügel, Beschriftungsschildern und Einsteckmodulen wird der Bedarf an ein modernes Interface Programm im Schaltschrank abgedeckt. Angeboten werden drei Bauweiten von 6,2mm; 15,7mm und 27,2mm für 1,2 und 4-polige Relais von 5 bis 30 Ampere.



Signalrelais

Die Produktpalette der Signalrelais bietet die passenden Produkte für Anwendungen in Faxgeräten, Druckern, Modems und der Gebäudetechnik. Der Anwendungsbereich für diese ein- und zweipoligen Relais liegt bei Schaltleistungen zwischen 1 und 3 Ampere, die Antriebe sind je nach Familie mono- bzw. bistabil. SMD Varianten sind ebenso verfügbar.



Electromechanical Relays from GOODSKY, SANYOU & NEXEM:

Power Relays

*These products are used in industry, building technology, white goods, and the energy management sector. The scope of applications extends to switching currents of between 3 to 40 Ampere, with one-pole and two-pole versions and coil power with actuation values of between 170mW and 1.6 Watt. **New** in our portfolio are relays with big contact gap from 1,5 to 3,0mm for photovoltaic and EVSE applications. These relays range from 12 to 200A, one and 2 poles.*

Panel Relays & Accessories

With the relays from the series LR, EMI/EZ, and RE, and the extensive range of accessories consisting of holders, retaining bars, labelling boards, and plug-in modules, the needs of a modern interface product range in the switch cabinet are covered. Three installation widths are available, of 6.2, 15.7 and 27.2mm for 1, 2 & 4-pole relays from 5 to 30A.

Signal Relays

The range of signal relays includes ideal products for applications in fax machines, printers, modems, and building management. The application range for these one-pole and two-pole relays covers switching capacities of between 1 and 3A, with the drives being monostable or bistable depending on the product family, and with SMD variants also available.





Für den Einsatz in verschiedensten Applikationen!

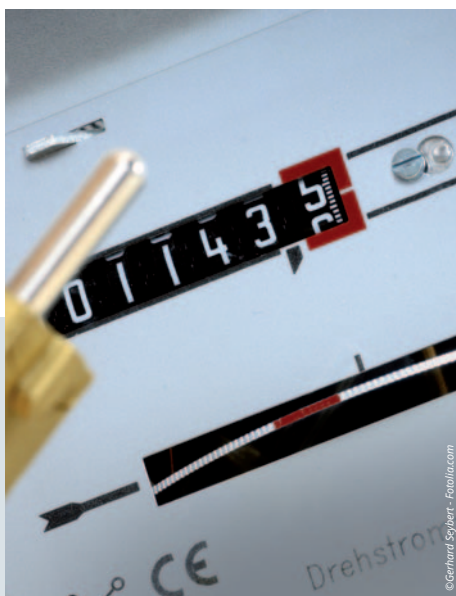
Automobilrelais

Das Relaisangebot beinhaltet ein umfangreiches Programm von print- und steckbaren Versionen für die Anwendungen im KFZ-Bereich. Diese Relais finden ihre Anwendung in Zentralverriegelungen, Wischersteuerungen, Fensterhebern, Standheizungen, Ventilatoren und Sitzmodulen, um nur einige Möglichkeiten aufzuzählen. Die Produkte sind standardisiert und mit den am Markt gängigen Pinlayouts kompatibel, der Strombereich bewegt sich zwischen 15 und 70 Ampere.



Gepolte Relais

Die Serien der polarisierten, bistabilen Relais mit ein- oder zweispuligen Antriebssystemen und Schaltströmen von 25 bis 120 Ampere vervollständigen das Angebot. Diese Relais finden ihren Einsatz hauptsächlich in elektrischen Energiezählern. Die Anschlüsse werden in der Regel an die Applikation angepasst. Bei Bedarf helfen wir Ihnen gerne, das richtige Relais zu spezifizieren und eventuelle kundenspezifische Anpassungen mit dem Hersteller umzusetzen.



DC-Hochspannungsrelais

SANYOU hat sein Relaisportfolio um eine Serie von DC-Hochspannungsrelais erweitert. Das Angebot umfasst den Bereich von 10 bis 300 Ampere und Spannungen bis zu 1.000VDC. Spezielle Designmerkmale – wie Schaltkammern aus Keramik mit Magneten umgeben – ermöglichen das sichere Schalten bei hohen Spannungen. Typische Anwendungen für diese Schalter sind überall dort zu finden, wo Batterien zum Einsatz gelangen, wie in der E-Mobilität oder bei Energiespeichern.



Serving a Wide Range of Different Applications!

Automotive Relays

The relay offer includes an extensive product range of printable and pluggable versions for applications in the automotive sector. These relays are used in central locking systems, wiper control systems, window raisers, parking heating systems, ventilators, and seat modules, to mention just a few possibilities. The products are standardised and compatible with the conventional pin layouts available on the market, with the current range extending between 15 and 70 Ampere.

Latching Relays

The series of polarized bistable relays with single-coil or two-coil drive systems that range from 25 to 120A completes the portfolio. These relays are used mainly in electricity energy meters. The connections are, as a rule, adjusted to the application. If required, we shall be happy to specify the right relay for you and, if necessary, help implement the customer-specific adaptations with the manufacturers.

DC-High Voltage Relays

SANYOU completed their relay portfolio by a series of high voltage DC relays. The portfolio ranges from 10 to 300A for DC voltages up to 1.000VDC. Special design efforts including a ceramics switching chamber and blow out magnets secure a safe switching of the high voltage DC loads. Typical application for such relays are found in all devices where DC battery packs are involved such as in e-mobility and power storages.

RELAYS OVERVIEW



CODICO & Partners

Ihre Vorteile

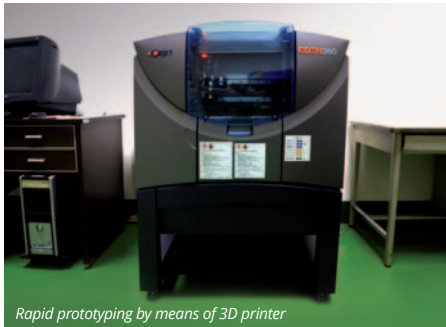
- Spezialisierte Vertriebsingenieure
- Relais Produktmanagement
- Applikationsberatung
- Vertriebsinnendienst
- Kundenspezifisch gestaltbare Logistikkonzepte
- Strategie und Roadmapping: Produktmodifikationen, Nachfolgegenerationen, neue Produkte, kundenspezifische Produkte
- Gemeinsame Kundenbesuche zur Sicherstellung der direkten Kommunikation mit dem Hauptsitz und den europäischen Kunden

Your Benefits

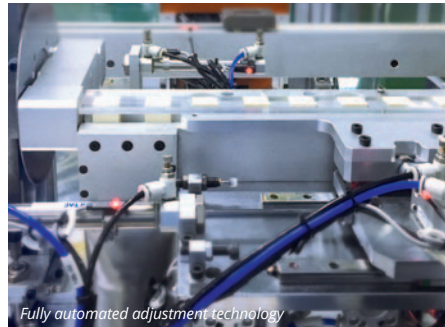
- *Specialized Sales Engineers*
- *Relay Product Management*
- *Application Support*
- *Inside Sales, Customer Service*
- *Logistic team offering all kind of solutions taking care of your supply*
- *Strategy and Road Mapping: product modifications, next generation designs, new products, customer specific products*
- *Joint customer visits to secure communication between headquarters & customer base EMEA*



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Rapid prototyping by means of 3D printer



Fully automated adjustment technology



Fully automated production line



VDE and UL certified laboratory



High precision piece part production



Production floor

GOODSKY


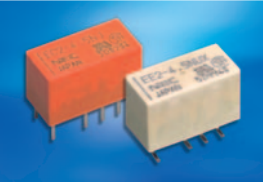



- Headquarters Taiwan, part of the ECE Group
- Founded in 1989, relay focus only
- Production in Taiwan, Shenzhen and Suzhou
- Annual capacity of 150 mio relays
- Highest focus on full automation program for core range such as JE, GQ, EMI
- 5% of the turnover invested back into R&D
- ISO 9001 2008, ISO/TS 16949 and ISO 14001
- Safety standards: VDE, UL-CUL, CQC, TÜV

SANYOU

- Headquarters Dongguan, China
- Founded in 1997, relay focus only
- Main production lines located in Dongguan, Mingguang & Ningbo
- Annual capacity of 800 mio relays
- 60 fully-automated production lines
- Autonomy of product development and construction of automated assembly lines
- VDE and UL certified laboratory
- ISO 9001 2008, ISO/TS 16949 and ISO 14001
- Safety standards: VDE, UL-CUL, CQC, TÜV

NEXEM

- Headquarters Shiroishi, Japan
- Long history of more than half a century as relay innovator
- Since April 2017 new owner and NEXEM being the new trademark with 100% relay dedication
- Annual capacity of 450 mio relays
- Production in Shiroishi and the Philippines
- 3rd and 4th generation signal relays as well as single and twin power pcb automotive relays
- ISO 9001, ISO 14001 and TS16949

Supplier	NEXEM	NEXEM	GOODSKY	SANYOU	GOODS
Series	UA2/UB2/UC2/UD2	EA2/EB2/EC2/EE2	JE	SRC/SRCH	GQ
Picture					
Highlights	UA2/UB2: Slim UC2/UD2: Flat – Values in ()	EA2/EB2: Flat EC2/EE2: Slim – Values in ()	Low Profile 10.5mm	10A Switching Capability	TV5/TV8 Rating for High Inrush
	Super Compact Design	Compact Design	IEC 60335-1 Version optional	Small Size for High Density PCB Mounting	12A Switching Ca
	THT and SMD	THT and SMD	Reflow Version optional	up to 105°C Ambient Temp.	Reflow, IEC60335-Free & T&R Versio
	Low Power Consumption	Low Power Consumption	4kV Coil-Contact	in acc. with IEC 60335-1, IEC60079-15 Ex Proof optional	DM2 Version: 16A
	One Coil Latching or Non Latch Coil Type	One & Two Coil Latching or Non Latch Coil Type	Reinforced Insulation	Reinforced Insulation	Reinforced Insula
Agency Approvals	UL, CSA, TÜV	UL, CSA, TÜV	UL&C-UL, VDE	UL&C-UL, VDE	UL&C-UL, VDE, TÜV

Contact Data

Contact Form	2CO	2CO	1NO, 1CO	1NO	1NO
Rated Current	1A	1A (2A)	NO: 8A, CO: 5A	SRC: 5A, SRCH: 7A	5A, LM1 Version: DM2 Version: 16A
Rated Voltage	250VAC, 220VDC	250VAC, 220VDC	250VAC	277VAC	250, 277VAC
Contact Material	Ag gold plated	Ag gold plated	AgNi, AgNi gold plated, AgSnO	AgNi, AgNi gold plated, AgSnO, AgSnO gold plated	5A: AgSnO 10A/16A: AgSnO+

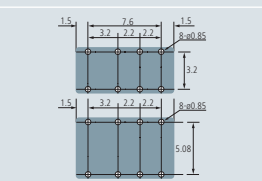
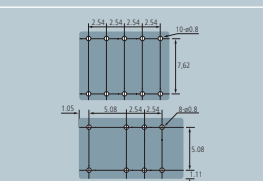
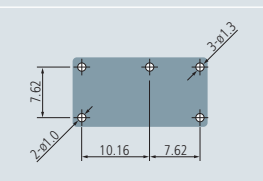
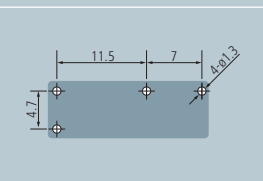
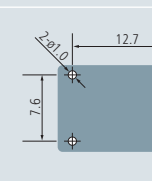
Coil Data

Coil Voltage	3 to 24VDC	3 to 24VDC	3 to 48VDC	5 to 24VDC	3 to 48VDC
Coil Power	100 to 230mW	100 to 200mW	200mW	200mW, 360mW	200mW
Insulation System	-	-	Class B, Class F	Class A, Class F	Class A, Class F

Insulation Data Initial Dielectric Strength...

...between Open Contacts	1.000VAC	1.000VAC	1.000VAC	750VAC	1.000VAC
...between Contact & Coil	1.500VAC	up to 1.500VAC	4.000VAC	4.000VAC	4.000VAC

Other Data

Ambient Temperature	+85°C	+85°C	+85°C	+105°C	+105°C
Type of Sealing	RTIII	RTIII	RTIII	RTII, RTIII	RTII, RTIII
Terminal Type	THT, SMT	THT, SMT	THT	THT	THT
Mounting	PCB	PCB	PCB	PCB	PCB
Dimensions L×W×H (mm)	10.6×5.7×8.8 (UA2/UB2) 10.6×6.5×5.5 (UC2/UD2)	14.3×9.3×7.5 (EA2/EB2) 15.0×7.5×10.0 (EC2/EE2)	20.0×10.0×10.5	20.5×7.2×16.6	18.2×10.0×14.9
Unit Weight	1.0g (UA2/UB2) 0.8g (UC2/UD2)	1.5g (EA2/EB2) 1.9g (EC2/EE2)	6.0g	3.6g	9.0g
Packing Info (pcs per Tube, Tray or Reel/pcs per box)	Tube: 50/6.000 (7.000) Reel: 2×800 (2×1.200)	Tube: 40 (35)/3.600 (3.360) Reel: 2×750 (2×500)	Tube: 20/2.000	Tray: 150/1.500	Tube: 25/2.000
Layout (THT only)					

KEY	SANYOU	SANYOU	SANYOU	SANYOU	GOODSKY	GOODSKY
	SJ	SJE	SRD/SRDI	SRG	LR	LR
						
	Small Size for High Density PCB Mounting	"H" Version: 10A 5A Version optional	12A Switching Capability	17A Switching Capability	5mm Slim	Low Profile of
Switching Capability	Class F Insulation System	Small Size for PCB Mounting	SRD(I) - "L" Version up to 20A on NO side	Sensitive Coil 360mW	Sensitive Coil 170mW	5kV Coil-Contact
Temperature, Halogen Free, Ex Proof optional	IEC60335-1, IEC60079-15 & Ex Proof optional	Class F Insulation System	Class F Insulation System	Class F Insulation System	Class F Insulation System	Sensitive Coil
Reliability	Reinforced Insulation	IEC60335-1 & IEC60079-15 Ex Proof optional	IEC60335-1 & IEC60079-15 Ex Proof optional	in acc. with IEC60335-1, IEC60079-15 Ex Proof optional	8A Switching Capability	TV5 Rating for
Coil Voltage	Sensitive Coil 200mW	Sensitive Coil 200mW	SRD Series for more Economic Applications	Standard PCB Layout	Upright & Flat Version, Socket use optional	IEC60335-1 Ver
Compliance	UL&C-UL, VDE	UL&C-UL, VDE	UL&C-UL, VDE	UL&C-UL, VDE	UL&C-UL, VDE	UL&C-UL, TÜV
	1NO	1NO, 1CO	1NO, 1NC, 1CO	1NO, 1NC, 1CO	1NO, 1CO	1NO
Current Rating	5A; "H" Version: 10A	"H" Version: NO: 10A/NC: 5A	NO: 10A/NC: 7A SRD (I) - L: NO 17A	NO: 17A/NC: 10A	8A	16A
Voltage Rating	250, 277VAC	277VAC	250VAC	250VAC	277VAC	277VAC
Contact Material	AgNi, AgSnO	AgNi, AgSnO	AgNi, AgSnO	AgNi, AgSnO	AgNi, AgSnO	AgSnO
Control Voltage	5 to 24VDC	5 to 48VDC	5 to 60VDC	5 to 48VDC	3 to 48VDC	5 to 48VDC
Coil Power	200mW, 450mW	200mW, 400mW, 450mW	360mW	360mW	170mW	200mW
Insulation Class	Class A, Class F	Class A, Class F	Class A, Class F	Class F	Class B, Class F	Class B, Class F
Dielectric Strength	1.000VAC	1.000VAC	750VAC	1.000VAC	1.000VAC	1.000VAC
Dielectric Strength	4.000VAC	4.000VAC	SRD: 1.500VAC SRDI: 2.500VAC	2.500VAC	4.000VAC	5.000VAC
Temperature Range	+105°C	+105°C	+105°C	+105°C	+85°C	+85°C
Flammability	RTII, RTIII	RTII, RTIII	RTII, RTIII	RTII, RTIII	RTII, RTIII	RTII, RTIII
Mounting Style	THT	THT	THT	THT	THT	THT
Mounting Style	PCB	PCB	PCB	PCB	PCB	PCB
Dimensions	18.4×10.2×15.5	20.6×10.2×15.5	19.6×15.4×15.5	21.0×16.0×21.6	28.0×5.0×15.0	22.2×16.2×11.1
Weight	5.6g	6.5g	8.5g	15.0g	6.0g	8.5g
Packaging	Tube: 50/2.000 Tray: 100/1.000	Tray: 100/1.000	Tube: 25/1.000	Tube: 25/500	Tube: 50/2.500	Tube: 20/1.200
						

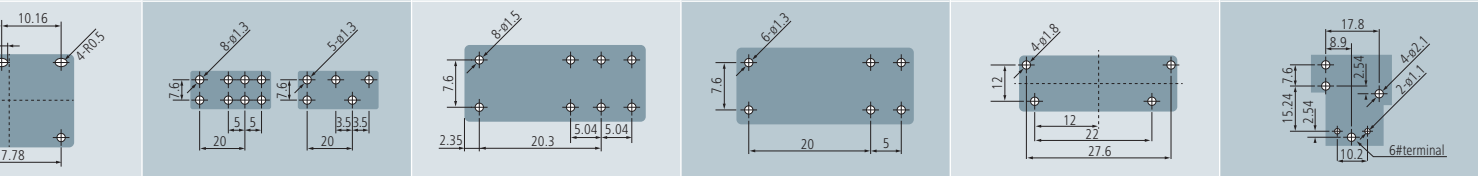
GOODSKY	SANYOU	GOODSKY	GOODSKY	SANYOU	SANYOU
SF	SM-1	EMI-2P	EML	SFK	SLA/SLC
					
11.0mm	3.5mm & 5mm Pinning	5mm Pinning	Tungsten Pre-Make Contact	25A Switching Capability	Many Housings Options
Contact	in acc. with IEC60335-1, IEC60079-15 Ex Proof optional	IEC60335-1 optional	Tungsten Load: 3000VA/230VAC	"H" Version with Contact Gap > 1.8mm	"H" & "S" Version with Contact Gap > 1.5mm
Power	200mW	AC Coils/NC Version available from Goodsky: EZ/EMI-1	DC Coil	Class F Insulation System	Class F Insulation System
Inrush	High Inrush	Socket Use optional	165A/20ms Inrush Peak	Version with Quick Connect available	SLA-G Version with 40A Switching Capability
Insulation	Class F Insulation System	Class F Insulation System	5kV Dielectric Strength	IEC60335-1 Version optional	IEC60335-1 & IEC60079-15 Ex Proof optional
Standards	UL&C-UL, VDE	UL&C-UL, VDE	UL&C-UL	UL&C-UL, VDE	UL&C-UL, VDE

	1NO, 1CO	2NO, 2CO	1NO	1NO	1NO, 1NC, 1CO
	3,5mm Pinning: 12A 5mm Pinning: 16A	8A	16A	25A	30A, 15A, 20A, 10A
	277VAC	277VAC	250VAC	250VAC	250VAC
	AgNi, AgSnO	AgNi, AgSnO+Indium	W Pre-Make & AgSnO	AgSnO	AgSnO

	5 to 110VDC, 24 to 230VAC	5 to 110VDC, 24 to 230VAC	3 to 60VDC	5 to 24VDC	5 to 110VDC
	400mW, AC: 0.75VA	400mW, AC: 0.75VA	400mW	900mW/H: 1.4W	900mW/H: 1.1W, S: 1.6W
Class	Class B, Class F	Class B, Class F	Class B	Class A, Class F	Class A, Class F

	1.000VAC	1.000VAC	1.000VAC	1.500VAC, H: 2.500VAC	1.000VAC, H&S: 2.000VAC
	5.000VAC	5.000VAC	5.000VAC	4.500VAC	1.500, 4.000VAC optional

	+85°C	+85°C	+85°C	+85°C	+105°C
	RTII, RTIII	RTII, RTIII	RTII, RTIII	RTII	open, RTII, RTIII
	THT	THT	THT	THT/QC	THT/QC
	PCB	PCB	PCB	PCB	PCB
Dimensions	29.0×12.6×15.7	29.4×12.8×17,5 (15,8)	29.0×12.7×15.7	30.1×15.7×23.3	SLA: 31.5×27.4×19.8
Weight	13.5g	13.5g	12.5g	22.0g	24.0g
Packaging	Tube: 25/1.000	Tube: 25/1.000	Tube: 25/1.000	Tray: 50/500	Tray: 20/400





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