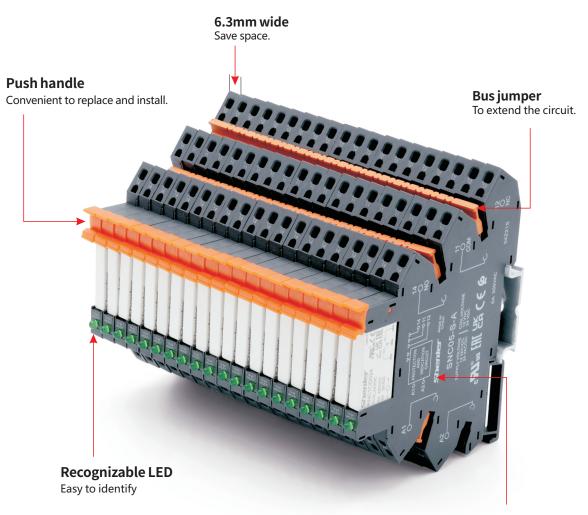
# Selection manual of industrial control relay

## RNC Interface Relay Module

- Ultra-slim, high sensitivity and low consumption, the maximum load power 6A.
- Reasonable structure, meets environmental protection requirements, the control voltage range can be extended with matching sockets.
- Shenler industrial relays are widely used in the output signal and safety drive of PLC, CNC system, robot, intelligent manufacturing and other control systems. It is the best choice to realize remote control, production and processing, packaging, transportation, testing, storage and other equipment and automatic assembly lines.



## Circuit protection design

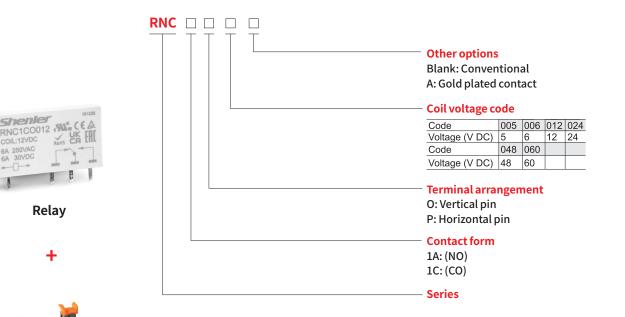
Bridge rectifier circuit, built-in surge absorber for AC and DC, in avoid of overvoltage.



# RNC

Interface Relay Module





Characterist	ics				
	Configuration	1A,1C			
	Load Resistance	6A/250VAC 30VDC			
	Max. switching capacity (resistive)	1500VA,180W			
Contact	Min. switching capacity	170mW(17V/10mA)			
Contact	Initial contact resistance	$\leq 100 \text{m}\Omega \text{ (gold plated contact} \leq 30 \text{m}\Omega \text{)}$			
	Material	Ag alloy			
	Electrical durability (normal tempe- rature)(frequency 1s on, 5s off)	NO: 6x10 <sup>4</sup> Cycles (600 Ops/h); NC: 3x10 <sup>4</sup> Cycles (600 Ops/h)			
	Mechanical durability	≥2 x 10 <sup>7</sup> Cycles (18000 Ops/h)			
Pick-up voltage (	23°C) (Rated voltage)	DC:≤75%			
Drop-out voltage	(23°C) (Rated voltage)	DC:≥5%			
Maximum voltage	e (23°C) (Rated voltage)	110%			
Insulation resista	nce	≥1000MΩ (500VDC)			
Coil operating po	3~24 VDC	approx. 0.175W			
	48~60 VDC	approx. 0.21W			
Operate time (at	nominal voltage)	≤8ms			
Release time (at	nominal voltage)	≤4ms			
Initial breakdown	Between open contacts	1000VAC/1min (leakage current 1mA)			
voltage	Between contacts and coil	4000VAC/1min (leakage current 1mA)			
Insulation	Rated voltage	250VAC			
characteristics	Pollution level	3			
IEC 60664 UL8	40 Overvoltage level	III			
Impulse withstan	d voltage (waveform: 1.2/50µs )	4000V			
Protection level		IP20			
Storage temperature/ humidity		-55~+85°C/ ≤85%RH (18 months)			
Working temperature/ humidity		-40~+85°C/ 5%~85%RH (No condensation)			
Air pressure		86~106KPa			
Shock resistance		10G (half-sine shock pulse: 11ms)			
Vibration resistar	nce	10~55Hz double-amplitude:1.0mm			
Mounting		РСВ			
Unit weight		approx. 6g			



Socket

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**Relay module** 

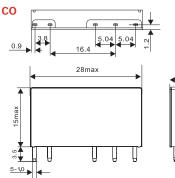
# RNC

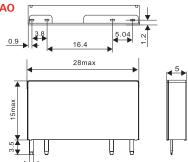
Interface Relay Module

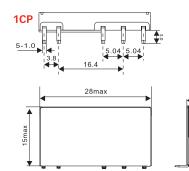
Coil Specifications (23°C)				
Nominal voltage V.DC (0.17W)	5	6	12	24
Coil resistance Ω	147	212	847	3250
Nominal voltage V.DC (0.21W)	48	60		
Coil resistance Ω	10971	17143		

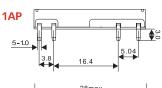
Coil resistance: under coil voltage 110V are measured with tolerance of  $\pm 10\%\Omega$ .

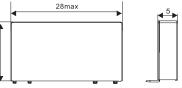
#### **Contact Specification** RNC1A, 1C Electrical durability Maximum switching capacity Contact current(A) operating cycles)(x10<sup>4</sup>) Durability(number of 100 5 50 RNC1NO DC 1 10 RNC1NC 0.5 3 1 0.1 2 3 4 5 6 9 8 current (A) Contact voltage(V) **Dimensions (mm)** 1A0 1**CO** 5.04 5.04 0.9 0.9 16.4 16.4 28max 28max 1 5max











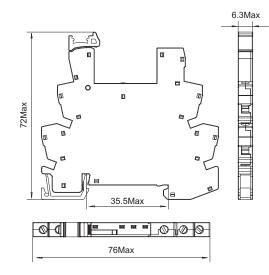
#### **Wiring Diagrams** 1CO **1AO 1CP** 1AP $-\Box_{-}$ 74-1 **Bottom view Bottom view** Side view Side view

15max

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racteristics	Model No	<u>`</u>	Inpu	t		Relay	
	SNB05-E-AR		6~24VDC			6~24VDC	
	SNB05-E-AR		6~24V			6~24VDC	
	SNB05-E-B		48V			24VDC	
	SNB05-E-C		110V			24VDC	
	SNB05-E-D		230V			48VDC	
	Characterist	ics					
	Nominal load	Curren	t		А	8	
	Nominal load	Voltage	;	V		300	
	Dielectric strength	Betwee	en coil and contact		V/min	4000	
10 NO		Between contacts		V/min	2500		
	Max. tightening torque			Nm	0.5		
ATO ME DA ANTONIA LO IL ATO DELLA ANTONIA COM	Wire size			AWG/mm	2 20-16/0.5-1.5		
STATE CE	Ambient temperature			°C	-40~+85		
-	Unit weight			g	19.5		
	Accessories						
NB05-Е	Bus jumper			Legend			
	SN20A			SN64P			

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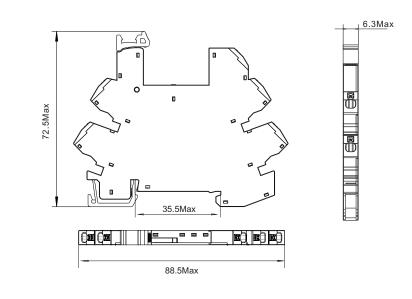


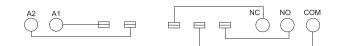




Characteristics							
Characteristics	Model No	).	Input			Relay	
	SNB05-ST-AR		6~24VDC		6~24VDC		
	SNB05-ST-A		6~24V		6~24VDC		
	SNB05-ST-B 48V		J		24VDC		
	SNB05-ST-C 11		110V	V		24VDC	
	SNB05-ST-D 230V				48VDC		
	Characteristics						
	Nominal load	Curren	nt			8	
	Nominal load	Voltage				300	
	Dielectric	Betwee	etween coil and contact		nin	4000	
	strength	Between contacts		V/r	nin	2500	
	Wire size			AW	/G/mm <sup>2</sup>	20-16/0.5-1.5	
No. S.	Ambient temperature			°C		-40~+85	
al -	Unit weight			g		19.5	
	Accessories						
	Bus jumper				Legend		
	E				In		
SNB05-ST				4			
	SN20A				SN64P	)	

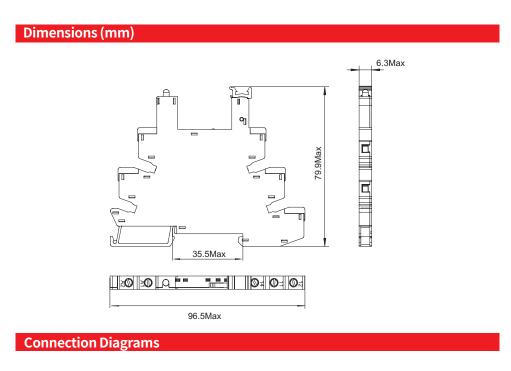
Dimensions (mm)





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Characteristics							
Characteristics	Medal Na		Input			Polov	
	Model No.		Input		Relay		
	SNC05-E-A		12~24V		12~24VDC		
	SNC05-E-B		48~60V		48~60VDC		
$\frown$	SNC05-E-C		110V		60VDC		
	SNC05-E-I	D	230V		60VDC		
	Characteristi	ics					
0	Nominal load	Current	t	А		8	
	Nominarioau	Voltage	Э			300	
	Dielectric	Between coil and contact		V/min		4000	
	strength	Between contacts		V/min		2500	
Al <b>Shenler</b> with 0	Max. tightening torque			Nm		0.5	
SNC00-BRANTINE UNDERCE D MARKANE UNDERCE D MARKANE UNDERCE D MARKANE UNDERCE D MARKANE LC 11(+)	Wire size			AW	G/mm <sup>2</sup>	20-16/0.5-1.5	
$A_{2}^{2} \qquad \qquad$	Ambient temperature			°C		-40~+85	
The second and the se	Unit weight			g 24		24	
	Accessories						
	Bus jumper		Legend		Partition plate		
SNC05-E							
	SN20B		SN64P			SN20S	

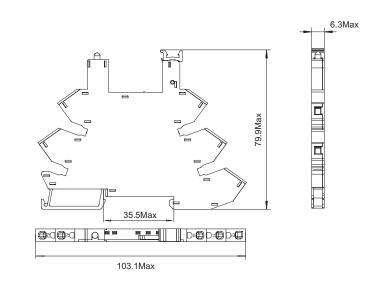




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Characteristics						
	Model No	).	Input		Relay	
	SNC05-S-A		12~24V		12~24VDC	
	SNC05-S-B		48~60V		48~60VDC	
_	SNC05-S-C		110V		60VDC	
	SNC05-S-D		230V		60VDC	
	Characteristics					
$\bigcirc$	Nominal load	Current	t	А	8	
<b>~~</b>	Nominarioau	Voltage	•	V	300	
	Dielectric	Between coil and contact		V/mi	n 4000	
	strength	Between contacts		V/mi	n 2500	
	Wire size			AWG	/mm <sup>2</sup> 20-16/0.5-1.5	
And material water water C 11	Ambient temperature			°C	-40~+85	
A2 SNCOULE AND A A	Unit weight			g	25	
S - CRI is Effl. CH - A MARK	Accessories					
	Bus jumper		Legend		Partition plate	
SNC05-S	SN20B					
			SN64P		SN20S	

# Dimensions (mm)







### Characteristics



Nominal load	Current	А	8
Nominarioau	Voltage	V	300
Dielectric	Between coil and contact	V/min	4000
strength	Between contacts	V/min	2500
Wire size		AWG/mm <sup>2</sup>	20-16/0.5-1.5
Ambient temp	erature	°C	-40~+85
Unit weight		g	2.6

SNC05-P

### Dimensions (mm)

