

NANO ICCS

Controllers



The **Nano ICCS** are small and powerful controllers shaped as relays with 5 or 6 pins. They can be connected to the circuit board using standard relay sockets.

Thanks to MSP430 16 Bit microcontroller with flash memory, you can control functions which can be created with a digital input and relay change over contact, such as

- Time delay relays
- Impulse relays
- Toggle relays

Application examples

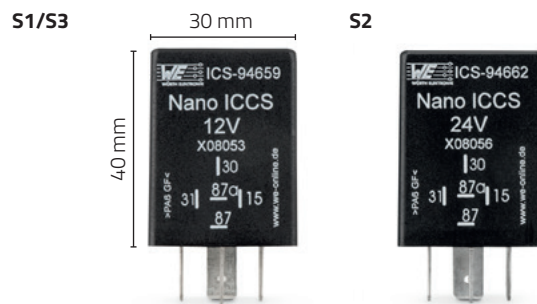
- Rear window heating
- Delayed turn-off of the lighting
- Fan switch-off delay
- etc.

Programming

- Programming through Würth Elektronik ICS
- Nano ICCS can be configured and parameterised and programmed individually:
 - Standard functions as delay, impulse, toggle functions etc.
 - Other functions, which can be realised with one digital input and relay change over contacts
 - Combination of all the functions with each other
- Creation of special programs on demand

General information	
Processor type	MSP430 16 Bit with flash memory
Dimension	30 x 30 x 40 mm
Operating temperature	-40 °C to 85 °C
Operating voltage	12 V or 24 V version
Continuous current	20/30 A (NC/NO)
Breaking current max	60 A
Quiescent current	<1 mA
Ingress protection	IP 53 IP 65 with specific socket
e1 approval-no.	03 5688

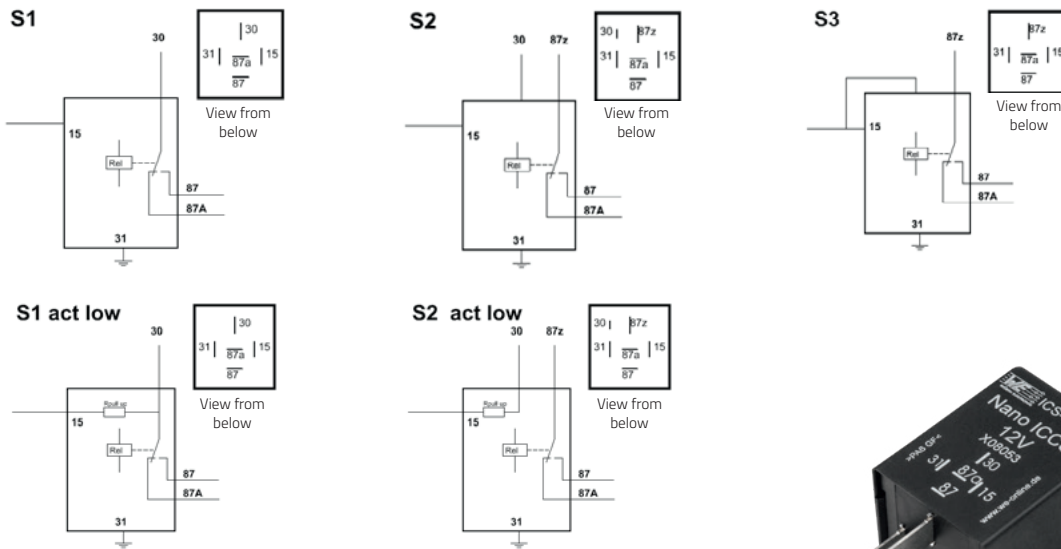
Housing



Diagrams concept			
	S1	S2	S3
Electronics' power	linked	standalone	linked
Main power	linked	standalone	standalone
Digital input	standalone	standalone	linked

Connection	
Diagrams S1 and S3	5 x 6.3 mm faston
Diagram S2	5 x 6.3 mm faston 1 x 2.8 mm faston

Diagrams



- On S1, S2 and S3 types: Input is active on high level (positive logic input)
- On S1 NEG and S2 NEG types: Input is active on low level (negative logic input)
- Diagrams S2 and S3: Relay contact potential free and it is able to switch battery or ground potential
- Diagram S2: Relay contacts and power supply separated from the trigger



Description	VCC	SDK number	Part number
Nano ICCS 12 V S1	VCC pin 30	X08053	ICS-94659
Nano ICCS 12 V S1 NEG	VCC pin 30	X08305	ICS-100642
Nano ICCS 12 V S2	VCC pin 30	X08054	ICS-94660
Nano ICCS 12 V S2 NEG	VCC pin 30	X08306	ICS-100643
Nano ICCS 12 V S3	VCC pin 15	X08055	ICS-94661
Nano ICCS 24 V S1	VCC pin 30	X08056	ICS-94662
Nano ICCS 24 V S1 NEG	VCC pin 30	X08307	ICS-100644
Nano ICCS 24 V S2	VCC pin 30	X08057	ICS-94663
Nano ICCS 24 V S2 NEG	VCC pin 30	X08308	ICS-100645
Nano ICCS 24 V S3	VCC pin 15	X08058	ICS-94664

IP65 Socket: ICS-102300

- Specially made relay socket for Nano / Micro series
- Efficient mounting solution for harsh environments up to IP65



This item is a standard product, please consider the relevant datasheet notes. The user is responsible for the product's functionality in its purposed system environment. Technical content may be modified and changed by Würth Elektronik ICS GmbH & Co. KG without any notice.

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