ICCS – Intelligent Control and Command Systems

WÜRTH ELEKTRONIK

CAN Isolator

CAN Isolator

The **ICCS CAN Isolator** gives you the ability to assure a clean communication of two or more ECUs with different voltage range or an isolation of a given ECU by providing a galvanic isolation.
The ICCS CAN Isolator can also be used as a repeater to allow CAN bus signals boost. It offers the possibility to add a 120 Ohm resistor to each of its ports by external wiring. This allows the module to act as the end point of a CAN network, or if the ICCS CAN Isolator is implemented into an existing line, it splits it into two physically terminated CAN bus lines still bridged together.

Technical data

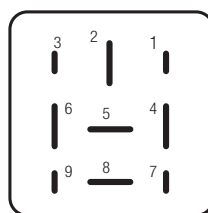| General information	
Connector	9 Pins DIN / relay shape
Dimensions	30 x 30 x 40 mm
Housing material	PA66 GF30
Operating temperature	-40 °C to 85 °C
Storage temperature	-40 °C to 85 °C
Ingress protection	IP53
Operating voltage	9 to 30 V DC
Pre-fusing	1 AM
Current consumption	< 30 mA @ 24 V supply

CAN bus	
acc. ISO 11898-2	High speed
Direction	Bidirectional data exchange possible
Baud rate	10 kBit/s to 1000 kBit/s

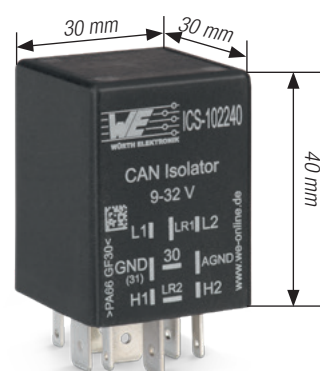| Inputs / outputs		
2	CAN buses	Galvanic isolation between two ports
2	CAN termination	Wiring connection of 120 Ω on each CAN port possible
2	Isolated ground	The two ground lines are split inside the module, do not connect them together.

Pin assignment

Pin	Description	Function
1	L2	CAN Low bus 2
2	LR1	CAN term (short to L1 to activate)
3	L1	CAN Low bus 1
4	GND 2	Ground for bus 2
5	KL30	Vsupply
6	KL31 / GND1	Ground for bus 1 / Supply GND
7	H2	CAN High bus 2
8	LR2	CAN term (short to L2 to activate)
9	H1	CAN High bus 1

Bottom View

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3    2    1

6    5    4

9    8    7
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Dimensions

30 mm 30 mm

40 mm

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Hardware Map

Supply 30 — DC/DC — 5Va DC — Isolated DC/DC — 5Vb DC

GND 1 31

GND 2

CAN H1 — CAN Transceiver — Optocoupler — CAN Transceiver — CAN H2

LR1 120 Ω Termination

CAN L1

LR2 120 Ω Termination

CAN L2
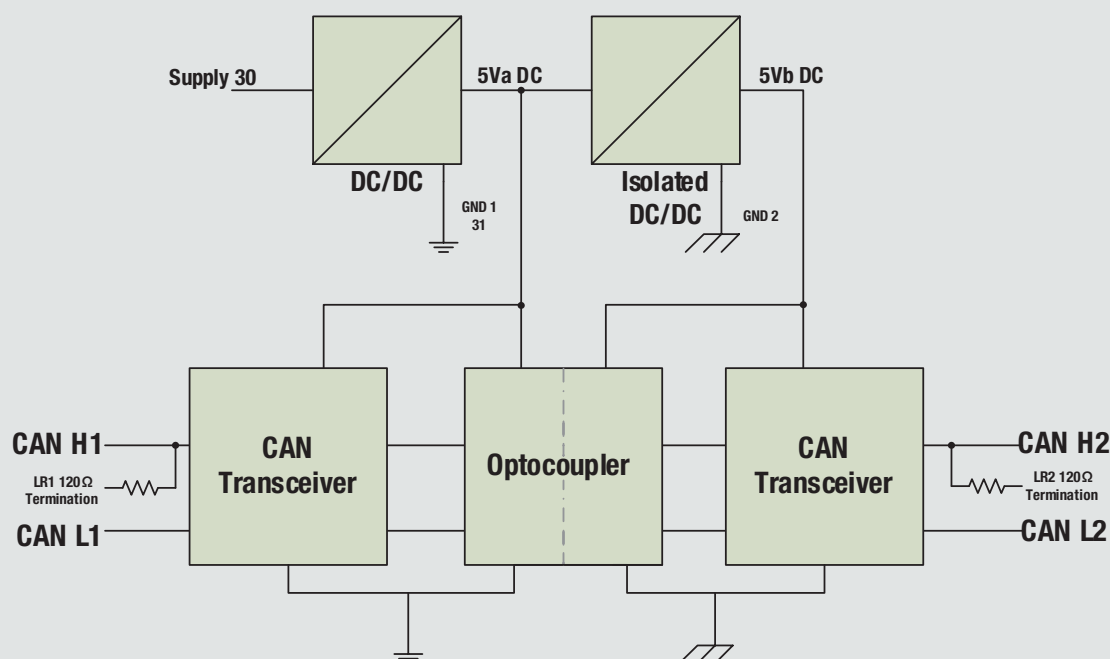
Order information

Available references	Part number
ICCS CAN Isolator	ICS-102240
9 pins IP65 socket	ICS-102300
9 pins standard socket	X02783

For more information visit us at
www.we-online.com/ics or call
+49 7940 9810-0

WÜRTH ELEKTRONIK ICS_0921

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.