

COUPLING UNIT

iCCU



Developed to enable powerline coupling of electrically isolated supply networks, the product permits C-/B-band data transfer in accordance with Cenelec EN-50065-1.

Technical Details:

- Standby consumption of 0.0 W
- C-/B-band powerline communication in acc. with Cenelec EN-50065-1.
- ANSI CEA 709.1 , 709.2 or EN 14908-1, EN 14908-2
- Voltage-proof up to 3 kV
- Also suitable for standalone operation as part of a light management system.
- No software-based configuration required.
- Connection with an NH fuse possible on request

Typical Applications:

- Lighting in proximity to buildings, street lighting
- Company premises, warehouses, sports facilities



iCCU – Intelligent, Capacitive Coupling Unit

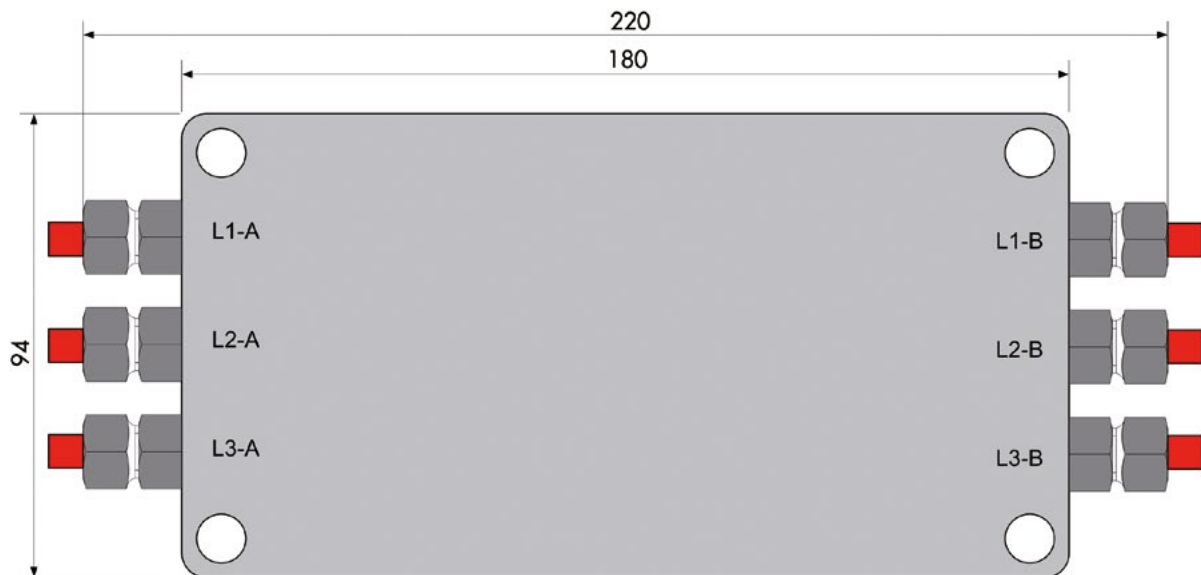
Technical Details

Capacitive Coupling Unit	186345.02
Input voltage	200 V AC to 250 V AC
Net frequency	50 Hz (+1% / -2%)
Power consumption	0,0W
Communication	
Powerline	Via the power supply line in acc. with Cenelec 50065-1
C band	primary band: 125 – 140 kHz
B band	secondary band: 95 – 125 kHz
Data transfer USA	ANSI CEA 709.1, ANSI CEA 709.2
Data transfer Europe	EN 14908-1, EN 14908-2
Electrical isolation	No input-to-output potential separation. Phase connections must be correct when coupling supply networks.
Connection cable	1 mm ² , length: 800mm
Conductor type of the connection cable	fine-stranded
Configuration	not required
Operation in	Powerline networks with and without a repeating function
Scope of delivery	High voltage silicone lead with open cable ends
Climatic Conditions	
Operating temperature range Tc	-25 °C to +80 °C
Lagertemperaturbereich	-25 °C to +85 °C
Resistance against surge voltage	3 kV
Standard	DIN EN 61037
Protection Class	I
Degree of Protection	IP65
Weight	770g
Dimensions (LxWxH)	180 x 94 x 60mm

The values detailed in this data sheet can change due to technical innovations; such changes will be made without separate notification. Further detailed information can be found at: www.vossloh-schwabe.com.

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Dimensions



Drill Holes



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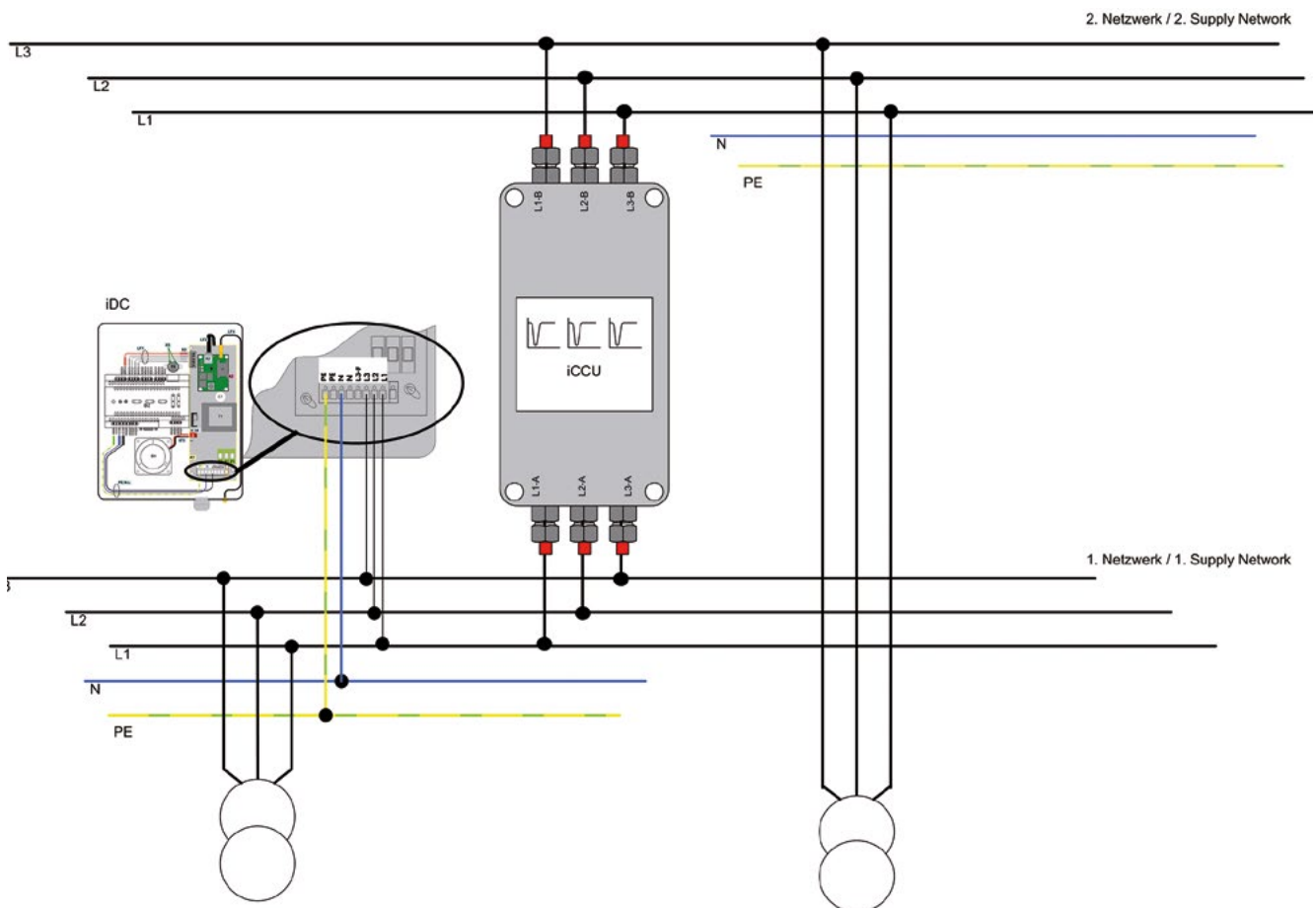
Casing

The extremely compact design of the unit facilitates installation in just about any sub-distribution.

Connection

The two supply networks are connectable using the high-voltage silicone cable.

Application No. 1

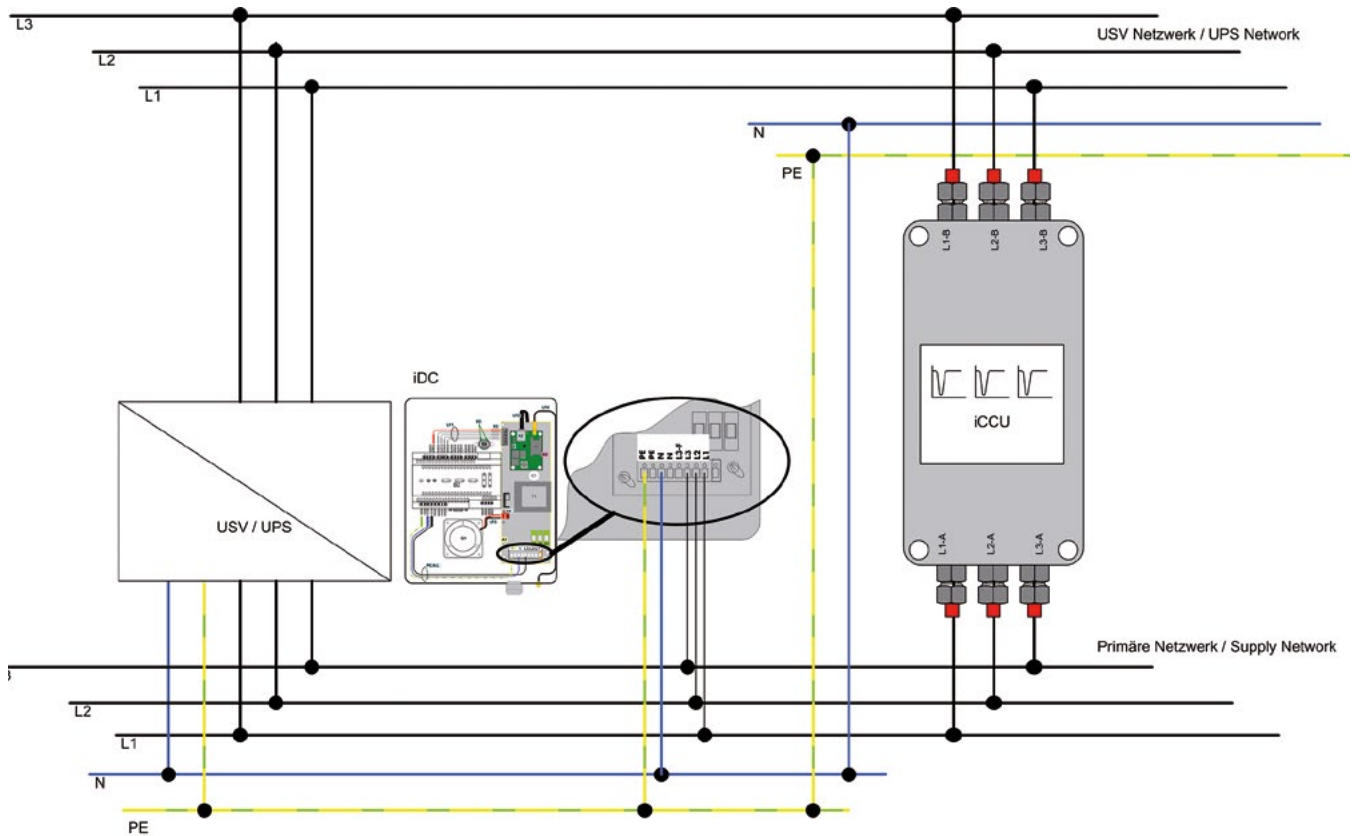


The iCCU can be used to couple the powerline signal into a further network.

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Application No. 2



The iCCU can be used to couple the powerline signal into a UPS-supported network.

Sales Text

Intelligent, capacitive coupling unit for powerline communication. Capable of standalone operation, suitable for lighting in proximity to buildings, street lighting and industrial lighting. Powerline signals are transferred using the B/C frequency range in acc. with Cenelec specifications. The unit is suitable for direct installation without requiring configuration and is transparent for data transfer purposes. Important: the unit draws no power when operated in standby mode. Care must be taken to avoid phase reversal when connecting the 230 V AC control inputs/outputs. For applications in the field of street lighting, the unit can also be provided with NH fuse inserts on request

Text for Invitations to Tender

Intelligent, capacitive coupling unit for powerline communication. Capable of standalone operation, suitable for lighting in proximity to buildings, street lighting and high-bay industrial lighting. Powerline signals are transferred using the B/C frequency range in acc. with Cenelec specifications. The unit is suitable for direct installation without requiring configuration and is transparent for data transfer purposes. Important: the energy draws no power when operated in standby mode. Care must be taken to avoid phase reversal when connecting the 230 V AC control inputs/outputs. For applications in the field of street lighting, the unit can also be provided with NH fuse inserts on request. Data transfer is possible in accordance with the ANSI CEA (709.1, 709.2) or the EN 14908(-1, -2) standard. Cenelec-compliant, bidirectional LON powerline communication is effected in the C band (primary; 125 ... 140 kHz) or the B band (secondary; 95 ... 125 kHz) in accordance with DIN EN 50065-1.

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iCCU – Intelligent, Capacitive Coupling Unit

Text for Invitations to Tender (cont.)

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The unit is suitable for electrically isolated coupling of three-phase 400 V AC supply networks, although care must be taken to ensure correct phase connection.

Electrical data: mains power (230 V (10%), frequency 50 Hz (+1%/-2%), power consumption 0 VA (standby) / (data transfer operation), resistance to surge voltage 2 kV/1.2/50 in acc. with DIN EN 61037, protection class I. Climatic capacity: operating temperature – 25 °C to + 65 °C, storage temperature – 25 °C to + 85 °C. Polycarbonate (PC) casing. Dimensions (L/H/W): 330 mm / 55 mm / 95 mm. Weight: 770 g; degree of protection: IP65.