

## Signal conditioner - MCR-FL-C-UI-UI-DCI-24/230 - 2814838

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MCR 3-way isolating amplifier, with configurable inputs/outputs, reliable isolation and wide range power supply, for electrical isolation of analog signals



### Key commercial data

|                                      |           |
|--------------------------------------|-----------|
| Packing unit                         | 1 pc      |
| Weight per Piece (excluding packing) | 126.2 GRM |
| Custom tariff number                 | 85437090  |
| Country of origin                    | Germany   |

### Technical data

#### Dimensions

|        |          |
|--------|----------|
| Width  | 12.5 mm  |
| Height | 99 mm    |
| Depth  | 114.5 mm |

#### Ambient conditions

|                                 |                  |
|---------------------------------|------------------|
| Ambient temperature (operation) | -10 °C ... 70 °C |
| Degree of protection            | IP20             |

#### Input data

|                           |                                  |
|---------------------------|----------------------------------|
| Description of the input  | Current input                    |
| Configurable/programmable | Yes, can be reconnected/switched |
| Current input signal      | 0 mA ... 20 mA (default setting) |
|                           | 4 mA ... 20 mA                   |
| Max. input current        | approx. 22 mA                    |
| Voltage dissipation       | approx. 250 mV (at 20 mA)        |
| Description of the input  | Voltage input                    |

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### Technical data

#### Input data

|                                   |                      |
|-----------------------------------|----------------------|
| Voltage input signal              | 0 V ... 10 V         |
| Max. input voltage                | 11 V                 |
| Input resistance of voltage input | approx. 1 M $\Omega$ |

#### Output data

|                                 |                                  |
|---------------------------------|----------------------------------|
| Configurable/programmable       | Yes, can be switched             |
| Voltage output signal           | 0 V ... 10 V                     |
| Current output signal           | 0 mA ... 20 mA (default setting) |
|                                 | 4 mA ... 20 mA                   |
| Max. output voltage             | 11 V                             |
| Max. output current             | approx. 22 mA                    |
| Load/output load voltage output | $\geq 1$ k $\Omega$ (at 10 V)    |
| Load/output load current output | $\leq 600$ $\Omega$ (at 20 mA)   |

#### Power supply

|                          |                              |
|--------------------------|------------------------------|
| Supply voltage range     | 20 V AC/DC ... 253 V AC/DC   |
| Max. current consumption | 30 mA (Without load current) |
| Power consumption        | approx. 2 VA (AC)            |
|                          | approx. 1 W (DC)             |

#### Connection data

|  |                            |
|--|----------------------------|
| Connection method                      | Pluggable screw connection |
| Conductor cross section solid min.     | 0.2 mm <sup>2</sup>        |
| Conductor cross section solid max.     | 2.5 mm <sup>2</sup>        |
| Conductor cross section AWG/kcmil min. | 24                         |
| Conductor cross section AWG/kcmil max  | 14                         |
| Conductor cross section stranded min.  | 0.2 mm <sup>2</sup>        |
| Conductor cross section stranded max.  | 2.5 mm <sup>2</sup>        |
| Stripping length                       | 8 mm                       |
| Screw thread                           | M3                         |

#### General

|                                 |   |
|---------------------------------|---|
| No. of channels                 | 1   |
| Maximum transmission error      | $\leq 0.1$ % (of final value)                           |
| Maximum temperature coefficient | 0.005 %/K   |
| Limit frequency (3 dB)          | $< 10$ Hz (can be switched)                             |
|                                 | approx. 10 kHz (default setting, 10 Hz can be switched) |
| Step response (10-90%)          | 35 ms (at 10 Hz)  |
|                                 | 35 $\mu$ s (at 10 kHz)                                  |

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## Technical data

### General

|                                   |                             |
|-----------------------------------|-----------------------------|
| Protective circuit                | Transient protection        |
| Test voltage, input/output/supply | 4 kV (50 Hz, 1 min.)        |
| Color                             | green                       |
| Housing material                  | Polyamide PA non-reinforced |
| Mounting position                 | any                         |
| Conformance                       | EMC directive 2004/108/EC   |

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27210120 |
| eCl@ss 4.1 | 27210120 |
| eCl@ss 5.0 | 27210120 |
| eCl@ss 5.1 | 27210120 |
| eCl@ss 6.0 | 27210120 |
| eCl@ss 7.0 | 27210120 |
| eCl@ss 8.0 | 27210120 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001485 |
| ETIM 3.0 | EC001485 |
| ETIM 4.0 | EC001485 |
| ETIM 5.0 | EC001485 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211506 |
| UNSPSC 7.0901 | 39121008 |
| UNSPSC 11     | 39121008 |
| UNSPSC 12.01  | 39121008 |
| UNSPSC 13.2   | 39121008 |

## Approvals

### Approvals

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### Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

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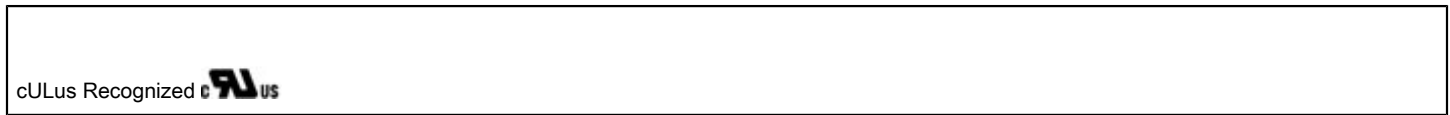
# Signal conditioner - MCR-FL-C-UI-UI-DCI-24/230 - 2814838

## Approvals

Ex Approvals

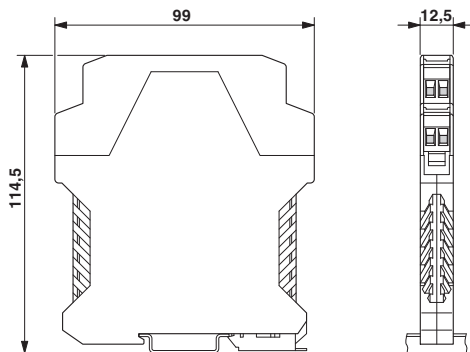
Approvals submitted

## Approval details

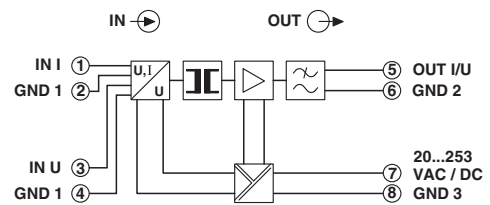


## Drawings

Dimensioned drawing



Circuit diagram



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Application drawing

