



PRODUCT-DETAILS

# CM-UFD.M31

## CM-UFD.M31 Grid feeding monitoring relay 3c/o,L-L= 0-540VAC,L-N=0-312VAC



### General Information

Extended Product Type	CM-UFD.M31
Product ID	1SVR560730R3401
EAN	4013614492914
Catalog Description	CM-UFD.M31 Grid feeding monitoring relay 3c/o,L-L= 0-540VAC,L-N=0-312VAC

Long Description	<p>The CM-UFD.M31 is a multi-functional grid feeding monitoring relay, which provides interface protection and is to be installed between a renewable energy system and the public grid. This innovative relay guarantees grid stability and seeks to prevent blackouts. If the voltage or frequency magnitudes of the public grid are outside the permitted range, then the device changes status and acts to disconnect the renewable energy system from the public grid by sending a signal to a decoupling unit (e.g. contactor, switch disconnecter or circuit breaker). As soon as the grid is stable again, the system may automatically reconnected. The CM-UFD.M31 provides different monitoring functions including over-/undervoltage and over-/underfrequency as well as rate of change of frequency (RoCoF) and vector shift monitoring functions, which detect a loss of mains event. This grid feed monitoring relay is certified in accordance to VDE-AR-N 4105, VDE-AR-N 4110 &amp; VDE-AR-N 4120.</p>
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### Ordering

EAN	4013614492914
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Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Popular Downloads

Data Sheet, Technical Information	2CDC112270D0201
Instructions and Manuals	1SVC560515M0001
CAD Dimensional Drawing	2CDC001079B0201

### Dimensions

Product Net Width	108 mm
Product Net Height	90 mm
Product Net Depth / Length	67 mm
Product Net Weight	0.304 kg

### Technical

Function	Over- and undervoltage monitoring Interrupted neutral monitoring Over- and underfrequency monitoring 10 minutes average value monitoring Vector shift detection ROCOF monitoring
Measuring Range	0 ... 540 V AC
Rated Control Supply Voltage (U <sub>s</sub> )	24 ... 240 V AC/DC
Output	3 c/o (SPDT) contacts
Terminal Type	Screw Terminals
Rated Operational Current AC-12 (I <sub>e</sub> )	(230 V) 4 A
Rated Operational Current AC-15 (I <sub>e</sub> )	(230 V) 3 A
Rated Operational Current DC-12 (I <sub>e</sub> )	(24 V) 4 A
Rated Operational Current DC-13 (I <sub>e</sub> )	(24 V) 2 A
Minimum Switching Capacity	24 V 10 mA
Degree of Protection	Housing IP20 Terminals IP20
Pollution Degree	3
Short-Circuit Protective Devices	Output Circuit NC - F Type Fuses 10 A Output Circuit NO - F Type Fuses 10 A
Electrical Durability	AC-12 50000 cycle
Mechanical Durability	Nr. Operations 30000000 cycle
Connecting Capacity	Flexible with Ferrule 1x 0.25 ... 4.0 mm <sup>2</sup> Flexible with Ferrule 2x 0.25 ... 0.75 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.25 ... 4.0 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.25 ... 0.75 mm <sup>2</sup> Flexible 1x 0.2 ... 4.0 mm <sup>2</sup> Flexible 2x 0.2 ... 1.5 mm <sup>2</sup> Rigid 1x 0.2 ... 6.0 mm <sup>2</sup> Rigid 2x 0.2 ... 1.5 mm <sup>2</sup>

Tightening Torque	0.5 ... 0.6 N·m
Wire Stripping Length	8 mm
Mounting Position	1 ... 6
Mounting on DIN Rail	TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
Standards	VDE-AR-N 4105 VDE-AR-N 4110 VDE-AR-N 4120

**Technical UL/CSA**

Connecting Capacity UL/CSA	Flexible with Ferrule 1x 24-12 AWG Flexible with Ferrule 2x 24-18 AWG Flexible with Insulated Ferrule 1x 24-12 AWG Flexible with Insulated Ferrule 2x 24-18 AWG Flexible 1x 24-12 AWG Flexible 2x 24-16 AWG Rigid 1x 24-10 AWG Rigid 2x 24-16 AWG
Tightening Torque UL/CSA	4.4 ... 5.3 in·lb

**Environmental**

Ambient Air Temperature	Operation -20 ... +60 °C Storage -25 ... +50 °C
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**Material Compliance**

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	1SVD981001-4501
RoHS Information	1SVD981027-0002
RoHS Status	Following EU Directive 2011/65/EU

**ABB EcoSolutions**

Environmental Product Declaration - EPD	1SAC200396H0001
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**Certificates and Declarations**

Declaration of Conformity - CE	1SVD981027-0002
TÜV Certificate	TUEV_AR-N4110_500810200-2019 TUEV_BDEW_CM-UFD_M31 TUEV_AoC_44254-53768-01 TUEV_BDEW_D8_17_11_44254_017 MAVIR-OVRAM-JKV-00748-00-2024-05-31

**Container Information**

Package Level 1 Units	box 1 piece
Package Level 1 Width	121 mm

Package Level 1 Depth / Length	71 mm
Package Level 1 Height	99 mm
Package Level 1 Gross Weight	0.36 kg
Package Level 1 EAN	4013614492914

### External Classifications and Standards

Object Classification Code	B
ETIM 7	EC001438 - Voltage monitoring relay
ETIM 8	EC001438 - Voltage monitoring relay
ETIM 9	EC001438 - Voltage monitoring relay
eClass	V11.0 : 27371801
UNSPSC	39122331
E-Number (Finland)	2712563
E-Number (Norway)	4188111

### Categories

Low Voltage Products and Systems → Control Products → Electronic Relays and Controls → Grid Feeding Monitors

