



PRODUCT-DETAILS

CM-UFD.M31M

CM-UFD.M31M Grid feeding monitoring rel.
3c/o,L-L=0-540VAC,L-N=0-
312VAC,ModbusRTU



General Information	
Extended Product Type	CM-UFD.M31M
Product ID	1SVR560731R3701
EAN	4013614521126
Catalog Description	CM-UFD.M31M Grid feeding monitoring rel. 3c/o,L-L=0-540VAC,L-N=0-312VAC,ModbusRTU
Long Description	<p>The CM-UFD.M31M is a multi-functional grid feeding monitoring relay with Modbus RTU communication interface, 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 disconnector or circuit breaker). As soon as the grid is stable again, the system may automatically reconnect. The CM-UFD.M31M 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 & VDE-AR-N 4120 and may be connected to the state-of-the-art cloud solution, ABB Ability Energy and Asset Manager.</p>

Ordering

EAN	4013614521126
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	2CDC112270D0201
Instructions and Manuals	1SVC560515M0000
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	108 mm
Product Net Height	90 mm
Product Net Depth / Length	67 mm
Product Net Weight	0.312 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 _s)	24 ... 240 V AC/DC
Output	3 c/o (SPDT) contacts
Terminal Type	Screw Terminals
Rated Operational Current AC-12 (I _e)	(230 V) 4 A
Rated Operational Current AC-15 (I _e)	(230 V) 3 A
Rated Operational Current DC-12 (I _e)	(24 V) 4 A
Rated Operational Current DC-13 (I _e)	(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 100000 cycle
Mechanical Durability	30000000 cycle
Connecting Capacity	Flexible with Ferrule 1x 0.25 ... 4.0 mm ² Flexible with Ferrule 2x 0.25 ... 0.75 mm ² Flexible with Insulated Ferrule 1x 0.25 ... 4.0 mm ² Flexible with Insulated Ferrule 2x 0.25 ... 0.75 mm ² Flexible 1x 0.2 ... 4.0 mm ²

	Flexible 2x 0.2 ... 1.5 mm ² Rigid 1x 0.2 ... 6.0 mm ² Rigid 2x 0.2 ... 1.5 mm ²
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	1SVD981056-0001
RoHS Status	Following EU Directive 2011/65/EU

Certificates and Declarations

cULus Certificate	cULus508_20170830-E140448
Declaration of Conformity - CE	1SVD981056-0001
Declaration of Conformity - UKCA	1SVD981056-1000
EAC Certificate	EAC_RU_C-DE.ME77.B.00417-19
TÜV Certificate	TUEV_AR-N4110_500810200-2019 TUEV_BDEW_CM-UFD_M31 TUEV_AoC_44254-53768-01 TUEV_BDEW_D8_17_11_44254_017

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	0.365 kg
Package Level 1 EAN	4013614521126

Classifications

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

Categories

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

