

Data sheet

MFRk-E08 230 V AC, 24 V AC/DC

Page 1/9

P/N
110658

EAN 4250184122906

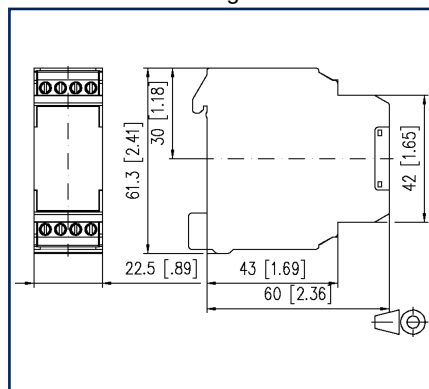
2024/10/23

Version: H

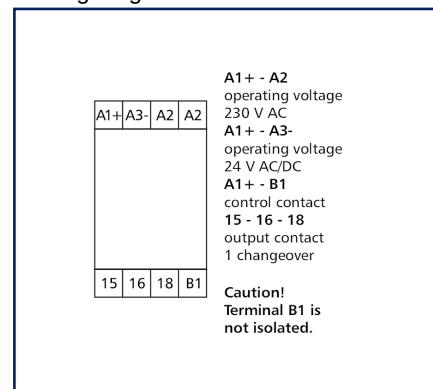
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

Multifunctional timer relay with incorporated coding switches to set functions. The time is set by means of a linear potentiometer on a relative scale.

- Connection with screw type terminal blocks
- Ten adjustable time ranges from 0.05 s to 30 h
- Seven selectable functions
- 1. On-delayed
- 2. Making-pulse interval
- 3. Off-delay
- 4. Breaking-pulse interval
- 5. Flashing for pause start
- 6. Flashing for pulse start
- 7. Off-delay with control contact B1 inhibition
- Not intended for marketing in North America



Technical Data

Supply

Operating voltage	230 V AC / 24 V AC/DC -10% ... +10%
Frequency range	50 ... 60 Hz
Power consumption	
Power consumption 230 V AC	5.2 VA
Power consumption 24 V AC	0.5 VA
Power consumption 24 V DC	0.3 W
Duty cycle relative	100 %
Response time typical	20 ms
Release time typical	20 ms
Fallback voltage range	≥ 0.15 UN
Time Ranges	
Time range adjustable	0.05 s - 30 h
Repeatability	± 0.01 %
Repeatability in the smallest time range (max.)	± 0.1 %

Inputs

Minimum switch-on duration	
Minimum switch-on duration (control contact)	≥ 5 ms
Minimum switch-on duration DC	≥ 0.2 s
Minimum switch-on duration AC	≥ 0.3 s

Outputs

Contacts	1 changeover contact
Contact material	AgSnO ₂
Switching voltage (max.)	250 V AC
Continuous Current	6 A
Protection	6 A
Switching frequency	1200 switching cycles/h
Mechanical life	1x10 ⁷ switching cycles
Electrical life	1x10 ⁵ switching cycles



Technical Data

Outputs

Recovery time

Recovery time (control contact)	≥ 10 ms
Recovery time 24 V AC	60 ms
Recovery time 24 V DC	50 ms
Recovery time 230 V AC	100 ms
Indicator	green and red LED

Insulation coil - contact set

Nominal voltage of the power supply system	230 / 400 V AC
Overvoltage category	III II
Degree of pollution	2 2
Rated test voltage	4 kV 2.5 kV
Type of insulation	basic insulation reinforced insulation

Housing

Dimensions

Dimension (W x H x D)	22.5 mm x 61.3 mm x 60 mm
Dimension (W x H x D)	0.886 in. x 2.413 in. x 2.362 in.
Weight	70 g
Mounting style	Standard rail TH35
Mounting position	any
Apposition	without distance
Connection type	Screw type terminal blocks

Terminal blocks

Wire cross section solid	0.34 mm ² - 2.5 mm ² / AWG 22-12
Wire cross section multi	0.25 mm ² - 2.5 mm ² / AWG 22-12
Wire cross section with wire ferrule	0.25 mm ² - 2.5 mm ² / AWG 22-12
Screw torque (max.)	0.5 Nm
Stripping length (min.)	8 mm

Technical Data

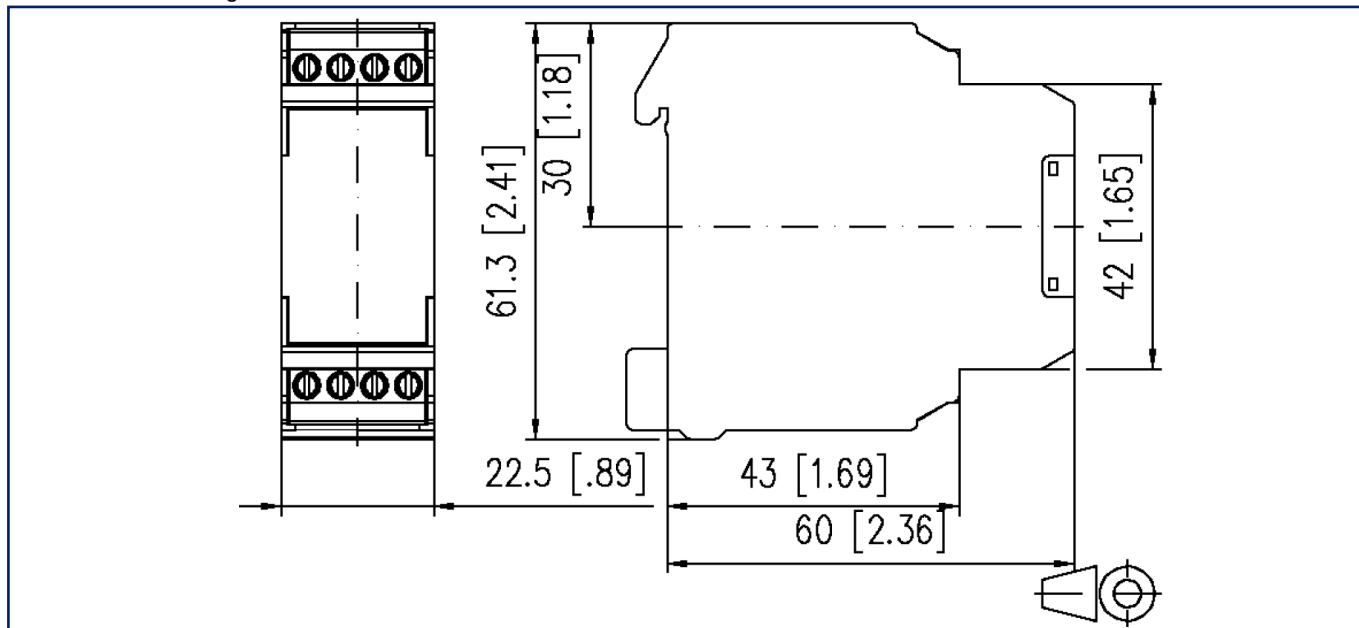
Material	
Material - Housing	Polyamid 6.6 V0
Color	gray
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polyamid 6.6 V0
Protection category according to IEC 60529	
Protection category - housing (acc. to IEC 60529)	IP40
Protection category - terminal blocks (acc. to IEC 60529)	IP20
Climatic Data	
Operating	
Temperature - Operating °C	-10 °C - 55 °C
Temperature - Operating °F	14 °F - 131 °F
Relative humidity	max. 85 % non-condensing
Storage	
Temperature - Storage °C	-25 °C - 70 °C
Temperature - Storage °F	-13 °F - 158 °F
Power loss	
Power loss (typical)	1 W
Classifications	
ETIM 7.0	EC001439
ETIM 8.0	EC001439
ETIM 9.0	EC001439

Application note

This product is a standard product of METZ CONNECT. METZ CONNECT is not aware of the specific intended use of the goods by the Customer or any customers of the Customer. The Customer guarantees that it has fully and sufficiently tested the use of the goods and any product modifications, product changes or product enhancements with regard to the specific intended use in accordance with the state of the art or in any other way. At METZ CONNECT's request, the Customer shall submit and make available meaningful evidence (e.g. test and laboratory protocols, certifications, etc.).

Illustrations

Dimensional drawing



Wiring diagram

A1+	A3-	A2	A2
15	16	18	B1

A1+ - A2

operating voltage

230 V AC

A1+ - A3-

operating voltage

24 V AC/DC

A1+ - B1

control contact

15 - 16 - 18

output contact

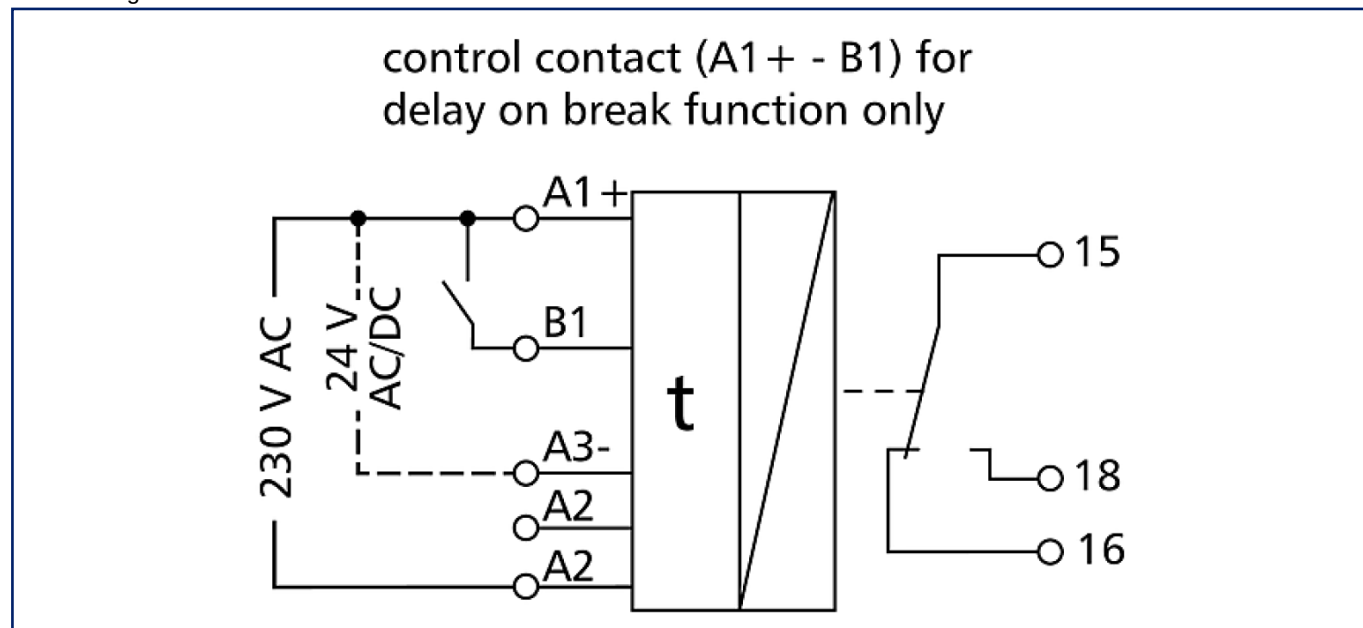
1 changeover

Caution!

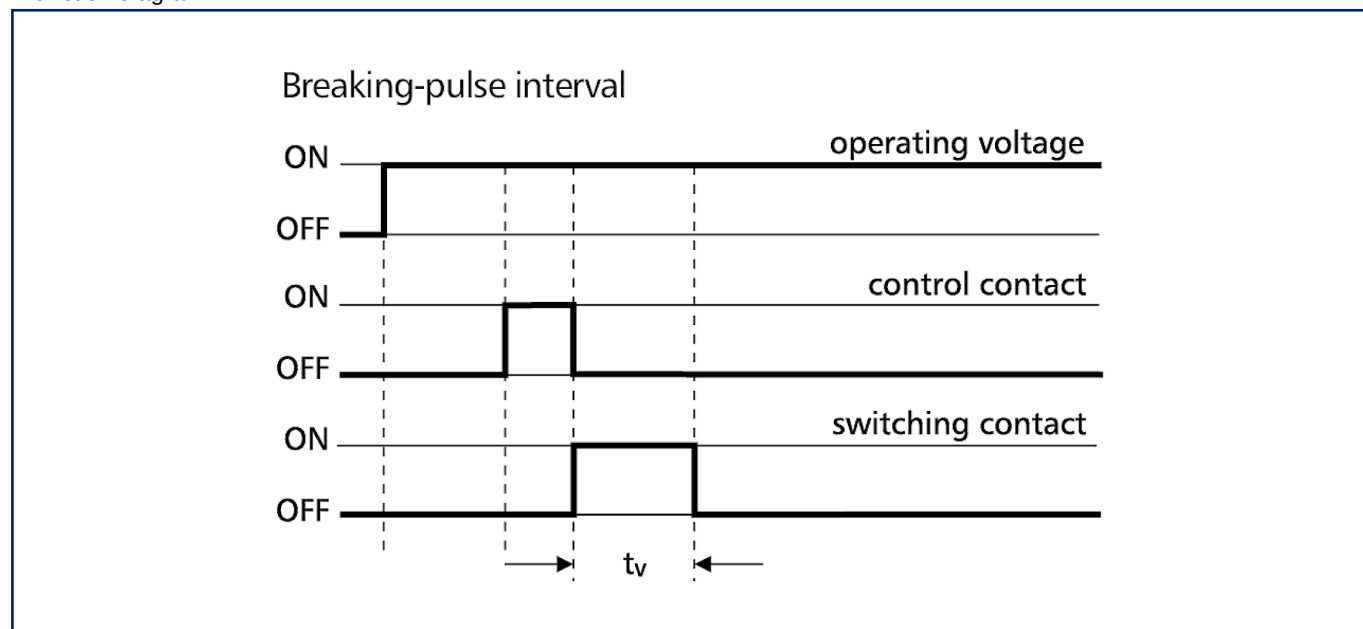
Terminal B1 is not isolated.

Illustrations

Circuit diagram



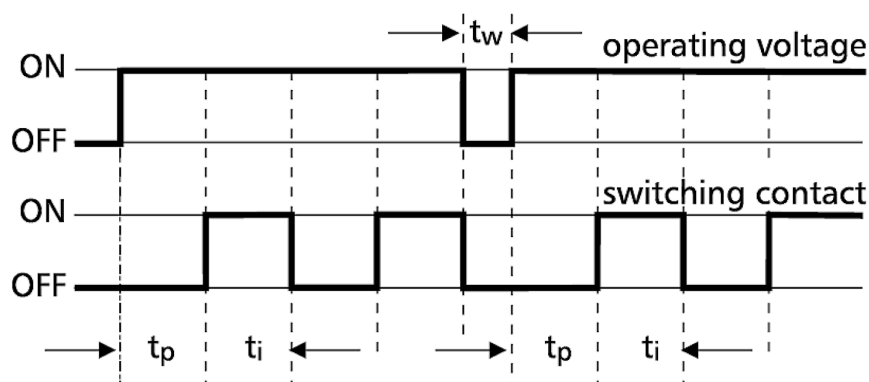
Function diagram



Illustrations

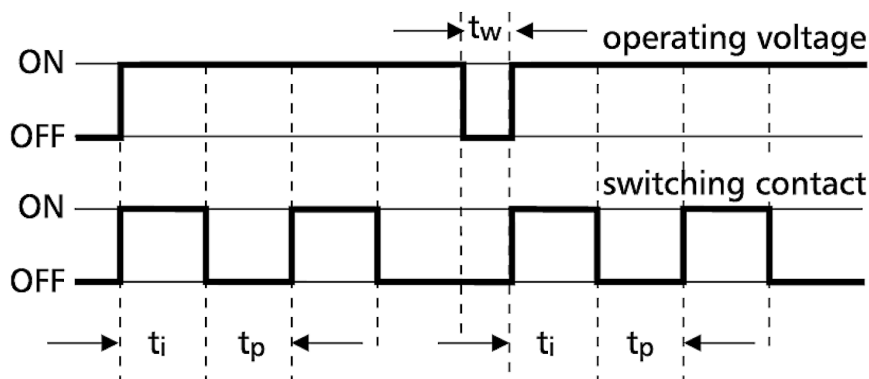
Function diagram

Flashing for pause start



Function diagram

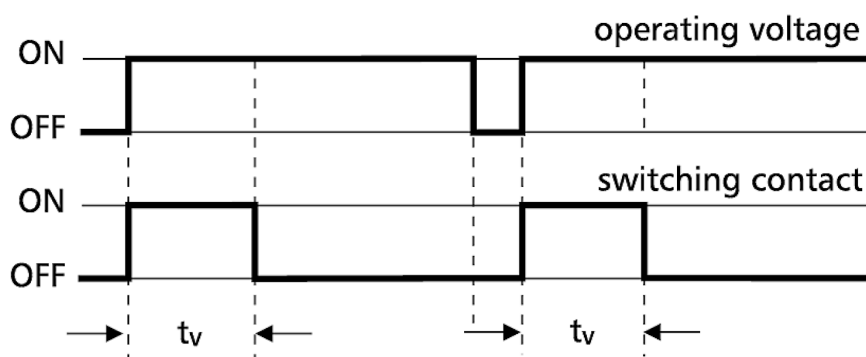
Flashing for pulse start



Illustrations

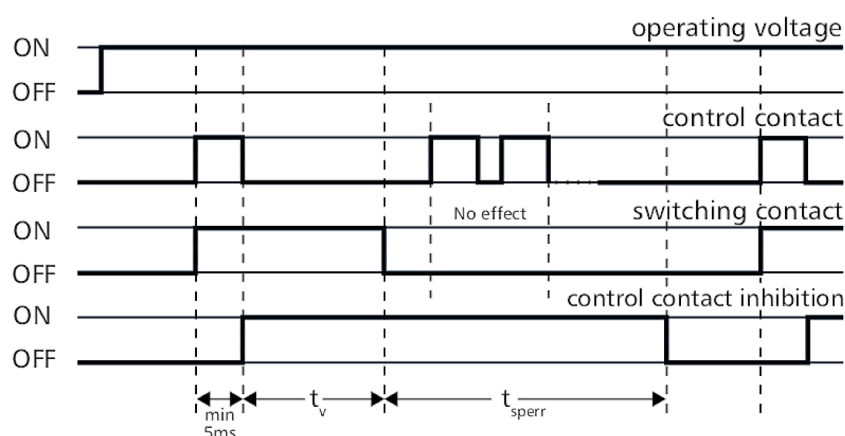
Function diagram

Making-pulse interval



Function diagram

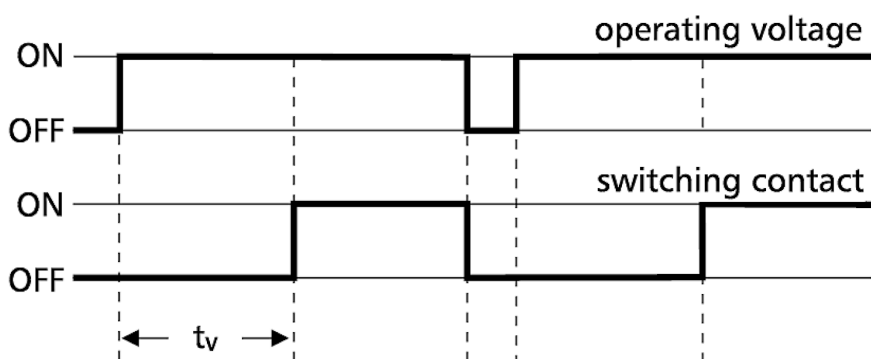
Off-delay with control contact B1 inhibition



Illustrations

Function diagram

On-delayed



Function diagram

Relapse delayed

