TEF4-OFF 1/5



PRODUCT-DETAILS

TEF4-OFF

TEF4-OFF Frontal Electronic Timer



General Information	
Extended Product Type	TEF4-OFF
Product ID	1SBN020114R1000
EAN	3471523130654
Catalog Description	TEF4-OFF Frontal Electronic Timer
Long Description	TEF4-OFF is a frontal electronic timer used to realize the timing function and allow a compact solution in the cabinet compared to separate timers. TEF4 electronic timers are front-mounted and locked on AF, AFC contactors or NF, NFC contactor relays. A mechanical indicator allows to show the state of the contactor. TEF4 electronic timers are supplied by a direct plug-in parallel connection to the coil terminals A1 - A2 of the contactor or contactor relay. A varistor is integrated on the timer to offer a built-in protection against surges in the contactor coil. The TEF4 is available for a wide control voltage range 24240 V AC/DC. TEF4 allow time-delayed functions up to 100 s in 3 distinct time ranges, independently of the control system. The time delay ranges are selected by a switch and the time delay can be adjusted by means of a rotary switch. The timing function of TEF4-OFF is activated by opening the device on which the timer is mounted. The OFF-delay version operates without additional control supply.

Ordering

Minimum Order Quantity 1 piece

TEF4-OFF 2/5

Customs Tariff Number 85389091

Manuals CAD Dimensional 2CDC00107960 Drawing Dimensions Product Net Width 43 Product Net Bepth 67.7 Length 67.7 Length 97.0 Product Net Height 41.6 Product Net Weight 0.066	Popular Downloads	
Dimensions Product Net Width		1SBC101026M6801
Product Net Depth / Length 43 Product Net Height 41.6 Product Net Height 41.6 Product Net Weight 0.06 Technical Number of Auxiliary Contacts NO Number of Auxiliary Contacts NO Number of Auxiliary Contacts NO IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 1. Standards IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 1. Rated Operational Auxiliary Circuit 24 No. 2. Voltage Auxiliary Circuit 50 / 60 Conventional Free-air acc. to IEC 60947-5-1, 0 = 40 °C Thermal Current (Ith) acc. to IEC 60947-5-1, 0 = 40 °C Rated Operational (24 / 127 V) Current AC-15 (Ic) (220 / 240 V) Rated Short-time for 1.s Withstand Current Low for 1.s Voltage (Icw) (AC-15) 1200 cycles per l' Switching Frequency (DC-13) 900 cycles per l' Switching Frequency (DC-13) 900 cycles per l' Rated Insulation Voltage acc. to IEC 60947-51.40 (Ly) acc. to IEC 60947-51.40 Maximum Mechanical 1800 cycles		2CDC001079B0201
Product Net Depth / Length 67.7 Product Net Height 41.6 Product Net Weight 0.06 Technical Number of Auxiliary Contacts NO Number of Auxiliary Contacts NO Standards Standards IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 12 Rated Operational Voltage Auxiliary Circuit 240 No. 12 Voltage Auxiliary Circuit 250 / 60 Conventional Free-air Thermal Current (In) acc. to IEC 60947-5-1, 0 = 40 °C Rated Operational Current AC-150 (Ia) (220 / 240 No) 1 Rated Short-time Withstand Current Low Voltage (Icw.) for 1 s Maximum Electrical Withstand Current Do-13 (Ia) (AC-15) 1200 cycles per Institute of the period of the per	Dimensions	
Length 41.6 Product Net Height 41.6 Product Net Weight 0.06 Technical Number of Auxiliary Contacts NO Number of Auxiliary Contacts NO Number of Auxiliary Contacts NO Standards IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 1. Rated Operational Auxiliary Circuit 240 Voltage Voltage Auxiliary Circuit 50 / 60 Conventional Free-air Control Circuit 50 / 60 Thermal Current (Ith) (20 / 240 V) Rated Operational (24 / 127 V) Current AC-15 (Ie) (220 / 240 V) Rated Operational (24 / 127 V) Current AC-15 (Ie) (20 / 240 V) Rated Operational (24 / 127 V) Voltage (Icw) for 1s Withstand Current Low for 1s Voltage (Icw) (20 / 240 V) Maximum Electrical (AC-15) 1200 cycles per Inswitching Frequency Maximum Electrical (AC-15) 1200 cycles per Inswitching Frequency Current DC-13 (Ie) (AC-15) 1200 cycles per Inswitching Frequency Current DC-13 (Ie) (AC-15) 120	Product Net Width	43 mm
Product Net Weight Technical Number of Auxiliary Contacts NO Number of Auxiliary Contacts NO Standards IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 14 Rated Operational Rated Operational Rated Operational Rated Frequency (f) Auxiliary Circuit 20 / 6 Conventional Free-air Auxiliary Circuit 50 / 66 Conventional Free-air Acc. to IEC 60947-5-1, 0 - 40 °C Conventional Free-air Acc. to IEC 60947-5-1, 0 - 40 °C Conventional Free-air Rated Operational Circuit 50 / 66 Conventional Free-air Rated Short-time For O.1 s Withstand Current Cov Rated Short-time For O.1 s Withstand Current Cov Rated Insulation Voltage Rated Insulation Voltage Rated Operational Circuit 50 / 66 Cov Rated Insulation Voltage Rated Operational Circuit 50 / 60 Cov Rated Insulation Voltage Rated Operational Circuit 50 / 60 Cov Rated Insulation Voltage Rated Operational Circuit 50 / 60 Cov Rated Insulation Voltage Rated Operational Circuit 50 / 60 Cov Rated Insulation Voltage Rated Rate Rate Rate Rate Rate Rate Rate Rate		67.7 mm
Technical Number of Auxiliary Contacts NO Number of Auxiliary Contacts NO Number of Auxiliary Contacts NO Standards IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 12 Rated Operational Auxiliary Circuit 24 V Voltage Auxiliary Circuit 24 V Voltage Auxiliary Circuit 24 V Control Circuit 50 / 60 Control Circuit 60 / 60	Product Net Height	41.6 mm
Number of Auxiliary Contacts NO Number of Auxiliary Contacts NC Standards IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 14 Rated Operational Voltage Rated Operational Auxiliary Circuit 24 Voltage Rated Frequency (f) Conventional Free-air Auxiliary Circuit 50 / 60 Conventional Free-air Rated Operational Current (lth) Rated Operational Rated Operational Read Operation	Product Net Weight	0.065 kg
Contacts NO Number of Auxiliary Contacts NC Standards IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 14 Rated Operational Voltage Auxiliary Circuit 240 No. 14 Rated Frequency (f) Auxiliary Circuit 50 / 60 Conventional Free-air Thermal Current (lth) acc. to IEC 60947-5-1, 0 = 40 °C Rated Operational Current (lth) (24 / 127 V) Rated Operational Current Low (220 / 240 V) 1 Rated Short-time for 0.1 s Withstand Current Low for 1. s Voltage (lcw) (AC-15) 1200 cycles per F Maximum Electrical (AC-15) 200 cycles per F Switching Frequency (DC-13) 900 cycles per F Rated Operational (24 V) 1 A / 2 Current DC-13 (le) acc. to IEC 60947-51 40 Rated Insulation Voltage acc. to IEC 60947-51 40 (Ut) acc. to U./CSA 30 Rated Impulse acc. to IEC 60947-51 40 Withstand Voltage (Uring) Televible with Insulated Ferrule 12 x 0.5 2.5 n Maximum Mechanical Flexible with Ferrule 1/2x 0.5 2.5 n Switching Frequency Flexible with Insulated Ferrule 2x 0.75 1.5 n Flexible with Insulated Ferrule 1x	Technical	
Contacts NC Standards IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 14 Rated Operational Auxiliary Circuit 240 Voltage Rated Frequency (f) Auxiliary Circuit 50 / 60 Conventional Free-air acc. to IEC 60947-5-1, 0 = 40 °C Thermal Current (lth) (24 / 127 V) Rated Operational (24 / 127 V) Current AC-15 (le) (220 / 240 V) Rated Short-time for 0.1 s Withstand Current Low for 1 s Voltage (lcw) (AC-15) 1200 cycles per legal Maximum Electrical (AC-15) 1200 cycles per legal Switching Frequency (DC-13) 900 cycles per legal With Stand Voltage (lcw) acc. to IEC 60947-5-1 40 Rated Insulation Voltage acc. to IEC 60947-5-1 40 (Uj) acc. to IEC 60947-5-1 40 Rated Impulse acc. to IEC 60947-5-1 40 With Stand Voltage (Uimp) 1800 cycles per legal Maximum Mechanical 1800 cycles per legal Switching Frequency Flexible with Insulated Ferrule 1/2x 0.5 2.5 n Connecting Capacity Flexible with Insulated Ferrule 2x 0.75 1.5 n Rigid Solid 1/2x 1 2.5 n	,	1
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Voltage Auxiliary Circuit 24 Av. Rated Frequency (f) Auxiliary Circuit 50 / 60 Control 50 / 60 Co	Standards	IEC/EN 60947-5-1, UL 508, CSA C22-2 No. 14-18
Conventional Free-air Thermal Current (Ith) Rated Operational Rated Operational Rated Short-time Withstand Current Low Voltage (Icw) Maximum Electrical Switching Frequency Rated Operational Curent DC-13 (Ie) Rated Short-time Switching Frequency Rated Short-time Maximum Electrical Switching Frequency Rated Operational Current DC-13 (Ie) Rated Short-time Rated Operational Current DC-13 (Ie) Rated Insulation Voltage Withstand Voltage Flexible with Insulated Ferrule 1/2x 0.5 2.5 in Flexible with Insulated Ferrule 2x 0.75 2.5 in Flexible with Insulated Ferrule 2x 0.75 2.5 in Rigid Stranded 1/2x 1 .	•	Auxiliary Circuit 240 V AC Auxiliary Circuit 24 V DC
Thermal Current (Ith) Rated Operational (24 / 127 V) Current AC-15 (Ie) (220 / 240 V) 1 Rated Short-time for 0.1 s With stand Current Low for 1 s Voltage (Icw) Maximum Electrical (AC-15) 1200 cycles per f Switching Frequency (DC-13) 900 cycles per f Switching Frequency (DC-13) 900 cycles per f Rated Operational (24 V) 1 A / 2 Current DC-13 (Ie) Rated Insulation Voltage (Uinp) Rated Impulse (Uinp) Maximum Mechanical 1800 cycles per f Switching Frequency Connecting Capacity Flexible with Ferrule 1/2x 0.5 2.5 m Auxiliary Circuit Flexible with Insulated Ferrule 2x 0.75 1.5 m Rigid Solid 1/2x 1 2.5 m Rigid Stranded 1/2x 1 2.5 m	Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Control Circuit 50 / 60 Hz
Current AC-15 (le) (220 / 240 V) 1 Rated Short-time for 0.1 s Withstand Current Low Voltage (lcw) Maximum Electrical (AC-15) 1200 cycles per h Switching Frequency (DC-13) 900 cycles per h Switching Frequency (DC-13) 900 cycles per h Current DC-13 (le) Rated Operational (24 V) 1 A / 2 Current DC-13 (le) Rated Insulation Voltage (Uin) Rated Insulation Voltage (Uimp) Maximum Mechanical (Book of the company		acc. to IEC 60947-5-1, ⊖ = 40 °C 5 A
Withstand Current Low Voltage (I _{cw}) Maximum Electrical Switching Frequency Rated Operational Current DC-13 (Ie) Rated Insulation Voltage (Ui) Rated Impulse Withstand Voltage (Uimp) Maximum Mechanical Switching Frequency Connecting Capacity Auxiliary Circuit Degree of Protection Source (IoC-13) 1200 cycles per in the property of the proper		(24 / 127 V) 3 A (220 / 240 V) 1.5 A
Switching Frequency (DC-13) 900 cycles per had acd Operational (24 V) 1 A / 2 Current DC-13 (Ie) Rated Insulation Voltage acc. to IEC 60947-5-1 46 (Ui) acc. to UL/CSA 30 (Ui) Rated Impulse Withstand Voltage (Uimp)) Maximum Mechanical 1800 cycles per have switching Frequency Connecting Capacity Flexible with Ferrule 1/2x 0.5 2.5 in Flexible with Insulated Ferrule 1x 0.75 2.5 in Rigid Solid 1/2x 1 2.5 in Rigid Stranded 1/2x 1 2.5 in Rigid	Withstand Current Low	for 0.1 s 8 A for 1 s 8 A
Current DC-13 (Ie) Rated Insulation Voltage (Ui) Rated Impulse Withstand Voltage (Uimp) Maximum Mechanical Switching Frequency Connecting Capacity Auxiliary Circuit Flexible with Ferrule 1/2x 0.5 2.5 m Rigid Solid 1/2x 1 2.5 m Rigid Stranded 1/2x 1 2.5 m Rigid Solid 1/2x 1 2.5 m Rigid Stranded 1/2x 1 2.5 m		(AC-15) 1200 cycles per hour (DC-13) 900 cycles per hour
Rated Impulse Withstand Voltage (U _{imp}) Maximum Mechanical Switching Frequency Connecting Capacity Auxiliary Circuit Flexible with Ferrule 1/2x 0.5 2.5 m Flexible with Insulated Ferrule 2x 0.75 1.5 m Rigid Solid 1/2x 1 2.5 m Rigid Stranded 1/2x 1 2.5 m Degree of Protection acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals I	•	(24 V) 1 A / 24 W
Withstand Voltage (U _{imp}) Maximum Mechanical Switching Frequency Connecting Capacity Auxiliary Circuit Flexible with Ferrule 1/2x 0.5 2.5 n Flexible with Insulated Ferrule 1x 0.75 2.5 n Rigid Solid 1/2x 1 2.5 n Rigid Stranded 1/2x 1 2.5 n Degree of Protection Auxiliary Circuit Flexible with Insulated Ferrule 2x 0.75 1.5 n Rigid Stranded 1/2x 1 2.5 n		acc. to IEC 60947-5-1 400 V acc. to UL/CSA 300 V
Switching Frequency Connecting Capacity Auxiliary Circuit Flexible with Ferrule 1/2x 0.5 2.5 n Flexible with Insulated Ferrule 1x 0.75 2.5 n Flexible with Insulated Ferrule 2x 0.75 1.5 n Rigid Solid 1/2x 1 2.5 n Rigid Stranded 1/2x 1 2.5 n Degree of Protection acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals I	Withstand Voltage (U _{imp}	4 kV
Auxiliary Circuit Flexible with Insulated Ferrule 1x 0.75 2.5 n Flexible with Insulated Ferrule 2x 0.75 1.5 n Rigid Solid 1/2x 1 2.5 n Rigid Stranded 1/2x 1 2.5 n Degree of Protection acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals I		1800 cycles per hour
		Flexible with Ferrule 1/2x 0.5 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 1.5 mm ² Rigid Solid 1/2x 1 2.5 mm ² Rigid Stranded 1/2x 1 2.5 mm ²
Terminal Type Screw Termin	Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20
	Terminal Type	Screw Terminals
AF A AF A	Suitable For	AF09 AF09Z AF12 AF12Z AF16 AF16Z

TEF4-OFF 3/5

AF26 AF26Z AF30 AF30Z AF38 AF38Z AF40 AF52 AF65 AF80 AF96 AFC09 AFC12 AFC16 AFC26 AFC30 AFC38 NF22E NFZ22E NF31E NFZ31E NF40E NFZ40E NFC22E NFC31E NFC40E

Technical UL/CSA

Tightening Torque Auxiliary Circuit 11 in-lb UL/CSA

Environmental

Ambient Air	Close to Contactor for Storage -40 +80 °C
Temperature	Operation -25 +70 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating	Without Derating 2000 m
Altitude Permissible	
Resistance to Vibrations	3g Closed Position & 2g Open Position 5 300 Hz

Material Compliance

Conflict Minerals	9AKK108467A5658
Reporting Template (CMRT)	
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

ABS Certificate	ABS_20-2060694-PDA
CB Certificate	CB_CN46281
CCC Certificate	CCC_2012010303572179
CQC Certificate	CQC2012010303572179
Declaration of	2020980303000172

TEF4-OFF 4/5

Conformity - CCC	
Declaration of Conformity - CE	1SBD250008U1000
Declaration of Conformity - UKCA	1SBD250039U1000
UL Certificate	UL-US-L252354-192-31702102-2 UL-CA-L252354-392-31702102-2
UL Listing Card	UL_E252354

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	82 mm
Package Level 1 Depth / Length	56 mm
Package Level 1 Height	51 mm
Package Level 1 Gross Weight	0.065 kg
Package Level 1 EAN	3471523130654
Package Level 2 Units	box 80 piece
Package Level 2 Width	254 mm
Package Level 2 Depth / Length	319 mm
Package Level 2 Height	200 mm
Package Level 2 Gross Weight	5.2 kg

Classifications	
Object Classification Code	К
ETIM 4	EC002498 - Accessories for low-voltage switch technology
ETIM 5	EC002498 - Accessories for low-voltage switch technology
ETIM 6	EC002060 - Timer block
ETIM 7	EC002060 - Timer block
ETIM 8	EC002060 - Timer block
eClass	V11.0 : 27371308
UNSPSC	39121523
IDEA Granular Category Code (IGCC)	4746 >> Timer controls
E-Number (Finland)	3706000
E-Number (Sweden)	3210257

TEF4-OFF 5/5

Categories

 $\textbf{Low Voltage Products and Systems} \rightarrow \textbf{Control Products} \rightarrow \textbf{Contactors} \rightarrow \textbf{Block Contactors}$

