Multifunctional time delay relay

MFT SU22S, MFT SU22P



MFT SU22S



MFT SU22P

• 7 Functions, 7 time ranges

- Multivoltage:
 - 12 ... 240 Vac / dc
- 2 output contacts

Functions

- E Delay on
- **E** Delay on version with control contact as opening contact
- A Delay off
- **I2** Pulse extension with control contact
- W2 Wiping on trailing edge
- **E1** Delay on with control contact
- **11** Pulse limitation timer voltage control
- **B2** Cycling timer starting on a pause

Time end ranges

Adjustment range 0,05 s ... 100 h

Output relay

2 potential free change over contacts 250 Vac 8 A

Indicators

Green LED ON:indication of supply voltageGreen LED flashes:indication of timeYellow LED ON/OFF:indication of relay output

Connecting voltage

12 ... 240 Vac/dc -10% +10% 48 ... 63 Hz, 100% duration of operation, IEC class 1c

Reference data

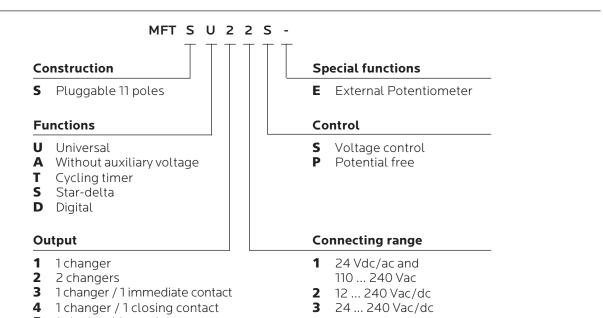
Selectron [®] MFT	Article no.
MFT SU22S	41140010
MFT SU22P	41140012
(Order data see chapter 1)	

Multifunctional time delay relay

MFT SU22S, MFT SU22P

Technical data	MFT SU22S	MFT SU22P
Nominal consumption		
12 240 Vac/dc	6 VA / 2 W	
Control contact / Voltage controlled		
Parallel switching of loads possible	yes	no
Parallel minimum load	1 VA or 0,5 W	-
Voltage dependence:	The potential between connec- tions 2 and 5 mustcover 90% of the supply voltage	Potential free control contact between connections 6 and 7 The internal voltage on these connectors is on the same potential as supply voltage
Connecting length between connections 2 and 5:	10 m or capacity <10 nF	-
Connecting length between connections 6 and 7:	At 230 VAC 10 VDC <1 mA	10 m or capacity <10 nF
Resistance	>1 M Ω (contact K2 open)	-
Rest current at parallel load:	approx. 2 mA at contact K2 open	-
Accuracy		
Base accuracy	±1% of scale limit	
Repetition accuracy	<5 ms or <0,5%	
Adjustment accuracy	≤5% of scale limit	
Temperature influence	≤0,01% / °C	
Voltage influence		
Reaction times		
Operating return time K1	max. 60 ms / 30 ms	
Reaction time K2	max. 30 ms	
Min. pulse/pause time K2	ac 100 ms / dc 50 ms	5
Recovery time	max. 100 ms	

Type key



5 1 closing / 1 opening contact

Function descriptions

E - Delay on

When the supply voltage U (K1 closed) is applied, the set interval t begins (green LED U/t flashes). After the interval t



has expired (green LED U/t illuminated) the output relay switches into on-position (yellow LED illuminated). This status remains until the supply voltage U (K1 opened) is interrupted. If the supply voltage U is interrupted before expiry of the interval t, the interval already expired is erased and is restarted when the supply voltage U (K1 closed) is next applied.

E - Delay on - version with control contact as opening contact

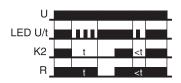
The supply voltage U must be constantly applied to the device (green LED U/t illuminated). When the control



contact K2 is opened, the set interval t begins (green LED U/ t flashes). After the interval t has expired the output relay switches into on-position (yellow LED illuminated). If the control contact K2 is closed before the interval t has expired, the interval already expired is erased and is restarted with the next cycle.

A - Delay off

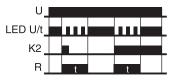
The supply voltage U (K1 closed or permanently connected) must be constantly applied to the device (green LED $\,$ U/t $\,$



illuminated). When the control contact K2 is closed, the output relay R switches into on-position (yellow LED illuminated). If the control contact K2 is opened, the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated) the output relay switches into off-position (yellow LED not illuminated). If the control contact K2 is closed again before the interval t (green LED U/t illuminated) has expired, the interval already expired is erased and is restarted with the next cycle.

12 - Pulse extension with control contact

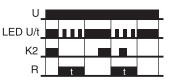
The supply voltage U (K1 closed or permanently connected) must be constantly applied to the device (green LED U/t



illuminated). When the control contact K2 is closed, the output relay R switches into on-position (yellow LED illuminated) and the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated) the output relay switches into off-position (yellow LED not illuminated). During the interval, the control contact K2 can be operated any number of times. A further cycle can only be started when the cycle run has been completed.

W2 - Wiping on trailing edge

The supply voltage U (K1 closed or permanently connected) must be constantly applied to the device (green LED U/t



illuminated). Closing the control contact K2 has no influence on the condition of the output relay R. When the control contact K2 is opened, the output relay switches into onposition (yellow LED illuminated) and the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated), the output relay switches into off-position (yellow LED not illuminated). During the interval, the control contact K2 can be operated any number of times. A further cycle can only be started when a cycle run has been completed.

E1 - Delay on with control contact

The supply voltage U (K1 closed or permanently connected) must be constantly applied to the device (green LED U/t $\,$



illuminated). When the control contact K2 is closed, the set interval t begins (green U/tLED flashes). After the interval t has expired (green LED U/t illuminated) the output relay R switches into on-position (yellow LED illuminated). This status remains until the control contact K2 is opened. If the control contact K2 is opened before the interval t has expired, the interval already expired is erased and is restarted with the next cycle.

Function descriptions

I1 - Pulse limitation timer voltage control

When supply voltage U (K1 closed) is applied, the output relay R switches into on-position (yellow LED illuminated)

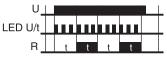


and the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated) the output relay switches into off-position (yellow LED not illuminated). This status remains until the supply voltage (K1 opened) is interrupted. If the supply voltage is interrupted before the interval t has expired, the output relay switches into off-position. The interval t already expired is erased and is restarted when the supply voltage is next applied.

B2 - Cycling timer starting on a pause

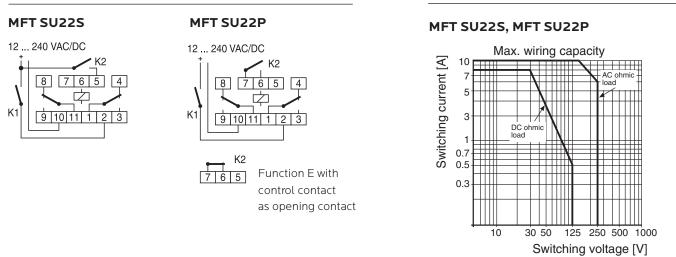
Load limit curves

When the supply voltage U is applied, the set interval t begins (green LED U/t flashes). After the interval t has



expired, the output relay R switches into on-position (yellow LED illuminated) and the set interval t begins again. After the interval t has expired, the output relay switches into off-position (yellow LED not illuminated). The output relay is triggered in the ratio 1:1 until the supply voltage is interrupted.

Connection



Dimensions

