



07137E00

Time Relay Series 8510

- Explosion protection to
 - CENELEC
 - IEC
- for use in Zone 1 and Zone 2
- for use in Ex e-enclosures

Selection Table

Version	Description	Rated operating voltage	Order number	Weight kg
ON Time relay 8510	ON Time relay Timing ranges: 0.05 sec ... 300 h	AC/DC: 24 V AC/DC: 42 V ... 48 V AC: 110 V ... 240 V (50 Hz ... 60 Hz)	8510/112-07-109-021	1.250
OFF delay time relay 8510	OFF delay relay with auxiliary power Timing ranges: 0.05 sec ... 300 h	AC/DC: 24 V (50 Hz ... 60 Hz AC)	8510/112-07-209-041	1.216
	OFF delay relay with auxiliary power Timing ranges: 0.05 sec ... 300 h	AC: 110 V ... 240 V (50 Hz ... 60 Hz)	8510/112-07-209-061	1.229
	OFF delay relay, without auxiliary power Timing ranges: 0.05 sec ... 10 min	AC/DC: 24 V ... 240 V (50 Hz ... 60 Hz AC)	8510/112-07-309-012	1.250


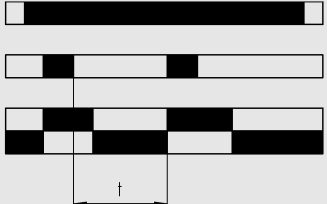
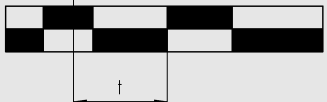
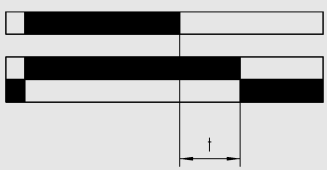
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Technical Data

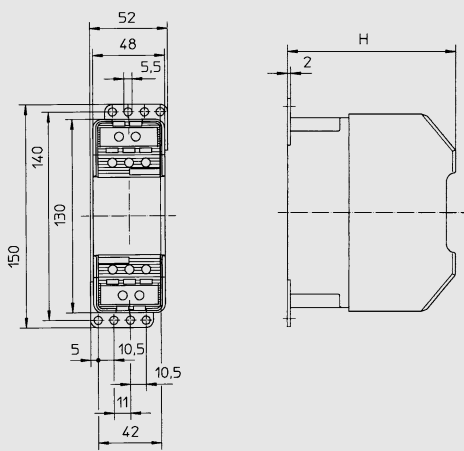
Version	8510/112-07-19-021	8510/112-07-29-041	8510/112-07-29-061	8510/112-07-39-012
Description	ON Time relay Timing ranges: 0.05 sec ... 300 h	OFF delay relay with auxiliary power Timing ranges: 0.05 sec ... 300 h	OFF delay relay with auxiliary power Timing ranges: 0.05 sec ... 300 h	OFF delay relay, without auxiliary power Timing ranges: 0.05 sec ... 10 min
Explosion protection	⊕ II 2G Ex de IIC ⊕ I M2 Ex de I	⊕ II 2G Ex de IIC ⊕ I M2 Ex de I	⊕ II 2G Ex de IIC ⊕ I M2 Ex de I	⊕ II 2G Ex de IIC ⊕ I M2 Ex de I
Certificates	DMT 00 ATEX E 073 U	DMT 00 ATEX E 073 U	DMT 00 ATEX E 073 U	DMT 00 ATEX E 073 U
Other certificates	IECEX, Canada (CSA), Belarus (Promatomnadzor)	IECEX, Canada (CSA), Belarus (Promatomnadzor)	IECEX, Canada (CSA), Belarus (Promatomnadzor)	IECEX, Canada (CSA), Belarus (Promatomnadzor)
Ambient temperature				
Storage	- 40 °C ... + 85 °C	- 40 °C ... + 85 °C	- 40 °C ... + 85 °C	- 40 °C ... + 85 °C
Operation	- 20 °C ... + 40 °C	- 20 °C ... + 40 °C	- 20 °C ... + 40 °C	- 20 °C ... + 40 °C
Power input	24 V AC / DC approx. 0.5 VA / W 42 V ... 48 V AC / DC approx. 1.8 VA / W 110 V ... 240 V AC approx. 2 ... 3 VA / W	24 V AC / DC approx. 2 VA / W	110 V ... 240 V AC approx. 2 ... 3 VA / W	24 V ... 240 V AC/DC 1 A for ≤ 30 ms

Technical Data				
Version	8510/112-07-19-021	8510/112-07-29-041	8510/112-07-29-061	8510/112-07-39-012
Control contacts				
No-load voltage	10 V ... 40 V DC	10 V ... 40 V DC	10 V ... 40 V DC	10 V ... 40 V DC
Switched current	< 1 mA	≤ 1 mA	< 1 mA	< 1 mA
Max. contact resistance	≤ 1 kΩ	--	≤ 1 kΩ	≤ 1 kΩ
Output circuit				
Relay output	yes	yes	yes	yes
Contacts	2 CO (1 instantaneous CO)	2 CO	2 CO	2 CO
Switching voltage	250 V AC	250 V AC	250 V AC	250 V AC
Switching current	AC-1: 4 A AC-15: 230 V / 3 A DC-13: 24 V / 2 A	AC-1: 4 A AC-15: 230 V / 3 A DC-13: 24 V / 2 A	AC-1: 4 A AC-15: 230 V / 3 A DC-13: 24 V / 2 A	AC-1: 4 A AC-15: 230 V / 3 A DC-13: 24 V / 2 A
Input circuit				
Supply voltage	AC: 110 V... 240 V AC / DC: 24 V AC / DC: 42 V ... 48 V	AC / DC: 24 V	AC: 110 V ... 240 V	
Mains frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Tolerances on supply voltage	- 15 % ... + 10 %	- 15 % ... + 10 %	- 15 % ... + 10 %	- 15 % ... + 10 %
Duty cycle	100%	100%	100%	100%
Minimum switch-on time				80 ms
Service life				
mechanical	30 million operations	30 million operations	30 million operations	30 million operations
electrical	0.1 Mio. operations, AC12: 4 A 230 V AC, resistive load	0.1 Mio. operations, AC12: 4 A 230 V AC, resistive load	0.1 Mio. operations, AC12: 4 A 230 V AC, resistive load	0.1 Mio. operations, AC12: 4 A 230 V AC, resistive load
Conductor cross section				
Auxiliary contacts	0.75 ... 1.5 mm ² finely stranded 0.75 ... 2.5 mm ² solid	0.75 ... 1.5 mm ² finely stranded 0.75 ... 2.5 mm ² solid	0.75 ... 1.5 mm ² finely stranded 0.75 ... 2.5 mm ² solid	0.75 ... 1.5 mm ² finely stranded 0.75 ... 2.5 mm ² solid
Material				
Enclosure material	Epoxy resin	Epoxy resin	Epoxy resin	Epoxy resin
Terminal cover	Polyamide; IP 20, finger-contact safety according to IEC 60 529	Polyamide; IP 20, finger-contact safety according to IEC 60 529	Polyamide; IP 20, finger-contact safety according to IEC 60 529	Polyamide; IP 20, finger-contact safety according to IEC 60 529

Selection Table

Description	Order number	Functional diagram
ON Time relay Timing ranges: 0.05 sec ... 300 h	8510/112-07-109-021	A1/B1/B2-A2  15-18, 25-28 15-16, 25-26 <small>10842E00</small>
OFF delay relay with auxiliary power Timing ranges: 0.05 sec ... 300 h	8510/112-07-209-041 8510/112-07-209-061	A1-A2  Y1-Z2  15-18, 25-28 15-16, 25-26 <small>10841E00</small>
OFF delay relay, without auxiliary power Timing ranges: 0.05 sec ... 10 min	8510/112-07-309-012	A1/A2  15-18, 25-28 15-16, 25-26 <small>10843E00</small>

Dimension drawings (all dimensions in mm) - subject to alterations



Type	Dimension H
8510/112	168 mm

04329E00

10652E00

8510/112

We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice. The illustrations cannot be considered binding.

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